Lectures

ON

SOME OF THE DISEASES OF THE FEMALE URETHRA AND BLADDER.

Delivered at Guy's Hospital in May, 1866.

BY J. BRAXTON HICKS, M.D., F.R.S.,

CO-LECTURER ON MIDWIFERY AND ASSISTANT PHYSICIAN-ACCOUCHEUR AT GUY'S HOSPITAL; EXAMINER IN MIDWIFERY AT THE UNIVERSITY OF LONDON.

(*Concluded from page* 481.)

IRRITABLE BLADDER is a very frequent trouble to women. It is distinguished from cystitis by the absence of mucus in the urine. There is a frequent desire to pass urine, but seldom much distress afterwards.

Many things will cause this. Often it is the relic of cystitis—an irritability of the mucous membrane after its inflammation has passed away. Sometimes it is dependent upon the state of the urine, whether acidity or alkalinity be excessive. Frequently it arises from a nervous temperament, or from reflex irritation from disease of the rectum, uterus, or urethra. Where prolapsus of uterus exists it is not unfrequent: the bladder is drawn out of its normal shape, and by this excited to contraction. Again, when the bladder is pressed upon by the pregnant uterus towards the latter stages, its cavity is flattened, and its fundus is drawn up, so that an ordinary male gum-elastic catheter will, in some cases, scarcely reach the fundus. This is in contrast with the partial retention produced by the pressure on the neck of the bladder by the uterus, when it has just risen out of the pelvis, in the middle of pregnancy. In the latter months the bladder will not contain any quantity. The same, to a certain extent, takes place in advanced ovarian disease.

When the uterus is anteverted, especially if enlarged, or when, owing to the lax state of the vagina, it descends from its normal position, it frequently rests on the neck of the bladder, provoking the latter to contract. This is principally most annoying when the patient is in the erect posture, passing off when lying down. I remember a very marked case of this.

A woman complained of inability to hold her urine, making her as uncomfortable as if she had vesico-vaginal fistula. This had existed for some time. On careful examination I could find nothing but a lax vagina, the fundus uteri bearing down on the neck of the bladder. Thinking this to be the probable cause of the annoyance, I prescribed an astringent injection. The use of this was immediately followed by complete relief, which still continued when I last heard of her, some time afterwards. She was still employing the injection.

In many cases where pressure of the misplaced uterus is the source of the complaint, much good may be done by the recumbent posture, combined, if required, with the replacement of the uterus, according to its position. When this plan is employed the symptoms often disappear in a very short time. In the case of reflex irritation the plan will necessarily be carefully to inquire as to the seat of original excitement, as I have before pointed out; for the first exciting cause may have been cured, and the effect yet remain. Where pressure has flattened out the bladder, we cannot do much; but perhaps some help may be derived from an abdominal belt applied above the seat of the bladder, so as to take off some of the pressure.

Malignant disease of the bladder alone is not very common. It is a very miserable and distressing complaint, combining the symptoms of severe cystitis with those of malignant disease.

Sooner or later we find blood in the urine, as before alluded to. We may have blood in the urine from renal mischief, from vicarious menstruation, from calculus and foreign body in the bladder, from inflamed mucous membrane of that viscus, from villous disease, from malignant disease, and from urethral polypus or other urethral disease. Now, how are we to diagnosticate each one of these causes? This is, indeed, sometimes very difficult. The catheter will help us to separate calculus and foreign bodies. If the appearance of blood has preceded cystitis, then it may be suspected that the blood comes from the bladder, especially if there be pain in the back and loins. This does not preclude the possibility of villous disease, because here the cystitic symptoms may not be developed before the appearance of the blood. If it be vicarious, then irregularity of the menses will guide to its probable origin. Where blood is present in simple cystitis, the diagnosis is very difficult at first: if the symptoms cease, we may expect the disease to have been simple. If malignant disease exist for any time, there will be thickening of the bladder, to be felt by digital examination per vaginam.

A patient suffered from severe cystitic symptoms, at the same time passing a large quantity of blood in the urine. There was nothing abnormal to be felt in the vagina; the sound detected nothing in the bladder. In the urine were found small whitish masses. These were examined by myself, and found to consist of bunches of villi, with a base of malignant disease. I lost sight of her, and therefore do not know her end. The case is published in the "Pathological Transactions," with a drawing of the growth. This disease may extend over a considerable surface of the membrane, and generally, if not always, runs the course of the cancroid growths; so that beyond immediately checking, by perchloride of iron and other styptics, I am afraid but little can be done towards a permanent cure. I would employ either the perchoride of iron or tannic acid.

The following is an instance of malignant disease of the bladder:—A single lady, about forty years old, had been suffering a year or two under vesical symptoms. She had consulted two eminent surgeons, who, finding blood and mucus in the urine, with frequent desire to micturate, passed the sound, but could discover no calculus. After they had treated her for some time, I saw her, and, upon vaginal digital examination, immediately detected on the right side of the bladder a mass of the size of a pigeon's egg. The microscope showed that masses of dead tissue were flowing with the urine. She was suffering much from ammoniacal urine, which greatly aggravated the original disease. The washing out of the bladder with acetous water was attended with marked relief, so that she could hold her water for four hours, whereas previously it was passed every few minutes. Solution of morphia was left within, which doubtless assisted in the relief she experienced.

I had an elderly patient in the hospital suffering from a large mass in the side of the bladder, accompanied with symptoms of very severe cystitis, a great quantity of blood being mixed with the mucus and pus. The pain was exceedingly severe. After first well washing out the bladder with acidulated water, I ordered a solution of thirty grains of nitrate of silver to the ounce of water to be injected, and a grain of morphia in solution to be left in after the nitrate had escaped. There was subsequently rather severe pain for a while, but in a short time this abated. This treatment was followed up daily, and she derived considerable relief so far as local pains and desire to micturate were concerned. As before observed, it is proper to draw off these stronger injections within a given time, instead of allowing them to be passed by the patient, and afterwards a little warm water injected to dilute and wash out the remainder.

When, after a patient has been suffering from malignant disease in the neighbourhood of the bladder, she is attacked with cystitis, we may fairly anticipate that the bladder has been invaded by the former complaint. The treatment here will be similar to that indicated in the cases above recited.

You will find the employment of opium absolutely essential to the treatment of this miserable complaint. It may also be given with great advantage as a vaginal suppository, or injected beneath the skin. Sometimes this plan will be more satisfactory than by the mouth.

Retention of urine.—Having already shown to you that retention is a cause of cystitis, I will now enumerate the principal causes producing retention of urine in the female.

1st. Pressure on the neck of the bladder or urethra, as by pregnant uterus, ovarian disease, misplaced uterus, anteversion, retroversion, fibroid enlargements of uterus, &c.

2nd. Foreign bodies, as calculus, &c.

3rd. Swelling of the urethra, as after labour; gonorrhœa, or other causes.

4th. Stricture of the urethra.

5th. Prolapsus of the uterus, as by distortion of the urethra.

6th. Paralysis.

7th. Hysterical nervousness.

In all cases of decided retention of urine it will be our duty

at first to make out its cause by a full examination—I mean by vaginal examination and by the catheter. It may, however, be made an exception when it occurs in single hysterical girls or women. In these we may for a reasonable time try the effect of remedies, such as a warm bath, opiates, &c.; after waiting twenty-four hours without benefit, however, we had better draw off the urine by catheter, postponing the repetition of the operation as long as possible if we find it due merely to nervousness. But in the other cases it is advisable to make out at once the cause rather than run the risk of allowing cystitis to be excited. If upon the introduction of the catheter we find a hard body in the urethra, the cause is clear. If we find paralysis of the limbs, then we may place the retention as its accompaniment. If it occur after labour, then we have most probably a swollen state of the urethra, preventing the exit of urine. Prolapsus of the uterus will readily show itself if it be the cause; and if stricture be present the difficulty of passing the catheter will readily explain the retention.

I think the most common cause of retention of the urine arises from pressure on the neck of the bladder and urethra; and this, as before noticed, is more likely to be produced by enlargements situated in the pelvic cavity and at the brim than by those which, although of much greater size, have risen well into the abdomen, or have always been there. Now you will readily see that the pregnant uterus up to the sixth month is more likely to cause retention than afterwards, when it tends not so much to obstruct the flow of urine as to prevent the accumulation of it. Again, ovarian tumours in the pelvic cavity, as well as fibroids in the uterus, are more likely to obstruct in early stages than in the later.

If the uterus be in its normal position it is not very likely to obstruct, even if it be enlarged; yet you will easily understand that when it has become retroverted, particularly if more or less jammed down, the pressure of the cervix against the urethra will cause retention. Of course, in this position the uterus is in the pelvic cavity, and hence, unless the uterus have been previously retroverted, such an occurrence cannot take place after the sixth month of pregnancy, even if it can so late as that. If a patient has violently exerted herself during the middle months of pregnancy, and be seized with bearing-down on the rectum, with retention of urine and pain in the pelvic region, we may suspect that the uterus has become retroverted. It will not be difficult to recognise this by examination. At the upper part of the back of the vagina is a large solid mass, while the os uteri is carried upwards and forwards towards the neck of the bladder, upon which it presses. The bladder also is drawn backwards, so that the posterior wall is curved inwards by its pressure. A tumour containing fluid is to be found above the pubes. The diagnosis is completed by drawing off with the catheter a considerable quantity of urine. In all these cases of retention we seldom see complete obstruction; a little urine is generally passing in driblets.

Now this sudden traumatic retroversion is very different from that which has come on by the enlargement of a pregnant uterus originally retroverted, or, as it most commonly is, retroflexed. There is no sudden invasion of symptoms; indeed, with the exception of the feeling of weight on the rectum and bearing-down, it seldom gives much annoyance till towards the fourth month, when, by pressing on the urethra by the cervix, it produces retention, generally imperfectly at first, until it becomes nearly complete. Examination of the abdomen, and per vaginam, of all the parts will reveal its true nature.

If the uterus be fixed by old adhesions, then the obstruction is severe, and the danger considerable; but generally the enlargement of the uterus in the upward direction, by distension of the anterior wall, gradually draws up the lower or posterior part out of the pelvis, and thus the difficulty is overcome. That the originally retroverted or flexed uterus is the cause of most of these obstinate cases of retention is probably the fact, as pointed out by Dr. W. Hunter and Dr. Tyler Smith. In these cases our attempts at replacement should be cautiously made, so that if any difficulty be felt, it is best to leave the case to nature, merely drawing off the urine if required. But violent efforts are most decidedly to be reprobated in any case, and it must be a very unusual one which would require induction of premature labour.

But there is a class of cases of retention in which, although the uterus is retroverted at the time, yet it seems highly probable that it is so secondarily, and is not the primary cause. It is curious that the last six cases I have seen have been of this kind. They occurred at about the second and third month of pregnancy, when, as you are aware, the long diameter of the uterus is not sufficiently enlarged to become fixed in the antero-posterior diameter of the pelvic cavity. There had been for some days previously a partial retention, but the complete trouble occurred rather abruptly. In all the uterus was most markedly retroverted. In one in particular (at the second month) the fundus of the uterus was driven down into Douglas's pouch, so as to distend the perineum, the bladder being enormously distended. Now although the retroversion was very marked, the emptying of the bladder enabled it to be restored by the finger pressing up the fundus with so little difficulty that it seemed in nearly all the cases to assume its natural position spontaneously. In all the cases no repetition of the retention occurred; all that was required was to keep the patient on the side, and empty the bladder by catheter the next day or two, giving an opiate once or twice to diminish the forcing downwards induced by the former straining.

In any case of retention, before attempts are made to effect restoration of the position of the uterus it is best, you will easily perceive, to pass the catheter first; the impediment to its entrance is small, though, owing to the curve of the urethra being great, it requires management to pass it readily.

Now sometimes a fibroid tumour, retroverting the uterus by its weight, acts as in the above cases. For example: I was called to a person who I knew had a fibroid of the uterus. She was suffering very severe pain from retention of the urine. I found the large mass down on the sacrum, the os uteri almost above the pubes. I drew off her urine by the catheter, and then restored the uterus by help of the sound, from which time she has had no retention, and the uterus has risen above the brim.

Although tumours of the uterus situated in the pelvic cavity are more liable to cause obstruction than when above the brim, yet altogether it is seldom they cause retention of urine, although, I confess, it seems wonderful that they do not, considering how much pressure they exert. I remember many years ago seeing one in which both the bowels and urethra were so seriously impeded that a fatal result occurred by the fibroid being jammed within the pelvis so tightly that it could not be lifted out. When these tumours press the brim in front so as to cause retention, the catheter must be passed, as in a case of delivery when the head is in the same position; that is, by pushing up the mass, and carrying the point of the catheter forwards, and, of course, the handle of the catheter on to the perineum. It is well to employ a small gum-elastic with stillet, which should be withdrawn as the catheter passes upwards.

I have a patient who is obliged to have the urine drawn off sometimes twice a day in consequence of a firm fibroid resting on the brim, so much so that it requires a considerable sweep of the catheter to pass in front of the growth. It is a troublesome circumstance in her case that she cannot pass the catheter herself, although we have tried to teach her, as you may many, the mode of using the instrument.

With regard to the management of cases of retention from paralysis, they fall chiefly under the care of the general physician. But as respects the local treatment, I think the frequent emptying of the bladder, and washing it out with acidulated water, is productive of great benefit; and it is well to leave a little weak acid in the bladder in order to neutralise the ammonia. There is usually in these cases a certain amount of urine overflowing, so as to give the appearance of incontinence of urine. It is always advisable to pass the catheter to ascertain the real state.

There is occasionally seen a kind of retention of urine occurring after severe nervous or physical depression, which cannot be classed with those exaggerated kinds found in highly hysterical persons. It doubtless arises from a want of nervous power, and yields to treatment adapted to the improvement of the general health. Should retention continue after twenty-four hours, it is well to employ the catheter; but it should not be too often or too early employed unless cystitis be threatened. In one case I found the galvanic current through the pelvis and loins to act very well and immediately in overcoming the retention. It will also be proper in these cases to endeavour to improve the system by tonics &c.

Perhaps the cases which will justly perplex you most, as young practitioners, are those dependent on the *hysterical* temperament, because there are none which more than these require the exercise of sound judgment. For if, on the one hand, you are over-active in attention to the local symptoms, you may, by employing the catheter, establish the very trouble you are seeking to cure; while, on the other hand, by permitting too long the retention, you may cause a serious injury to the bladder. Generally, however, the patient passes urine before it has produced any serious trouble in that organ; and you may, by diverting the patient's attention as much as possible from this symptom, and by attending to the general

hysterical state, find these symptoms vanish sooner than if you had been more active in your local treatment. You may at least allow thirty-six hours to elapse in such a case, but much would depend on the quantity of urine secreted, to be ascertained by the hand placed on the abdomen at the pubes. You see therefore that it is very important to make a correct diagnosis: the state of the urine passed before the attack should be ascertained, if possible, that you may know if any real disease have pre-existed. If you have reason to believe that none pre-existed, and that no retroversion of the uterus from violent exertion is likely to have occurred, then, by the use of an opiate, a warm bath, and a purgative, you will most probably succeed in removing the retention. After allowing the above-named time to elapse, it will, if retention still remain, be best to employ the catheter, if you have evidence of the full distension of the bladder.

Retention may also occur from the voluntary holding of the water for too long a period, whereby the bladder becomes over-distended, and loses its power of contraction. Cystitis frequently results from this. The urine must be drawn off, and the cystitis managed in the manner already indicated.

CONSIDERATIONS SUGGESTED BY THE STUDY OF 100 CASES OF STONE IN THE BLADDER OF THE ADULT,

RECENTLY OPERATED ON,

BY SIR HENRY THOMPSON,*

SURGEON-EXTRAORDINARY TO H.M. THE KING OF THE BELGIANS; PROFESSOR OF CLINICAL SURGERY, AND SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

THE following cases of stone in the bladder of adult patients are not selected in any way, but are those which my own practice has furnished during the last three or four years. No exception has been made, every case being recorded as it occurred; so that the last 100 adult patients on whom I have operated up to the time of my writing form the material for the remarks which I shall have the honour to submit to my professional brethren. I have taken these cases because all have been treated with the same instruments and on the same principle, and because the number is a simple one for percentage calculations, while it is sufficiently large to warrant our dealing with it in relation to some important particulars in connexion with this malady.

First, let me call your attention to the fact that these are all *adult* cases, and for the most part adults of an advanced age. It is necessary to bear this in mind, because, as we all know, the mortality following the operation of lithotomy before puberty is very inconsiderable as compared with that which occurs in after-life. Hence when we learn the rate of mortality in any given series of cases which contains patients of all ages, we do not really obtain any information on the subject unless we are at least supplied also with the number of patients of an age below puberty included in the total.

Reasoning from some extended researches respecting the death-rate in lithotomy which I very carefully made a few years since, I may safely assume that the mortality following that operation in children is 1 in 14 or 15 cases; that in middle-life it is 1 in 6 or 7; and after sixty years of age, about 1 in 3 or 4 cases. These broad numerical statements will serve our purpose as standards of comparison in dealing with the series of facts to which I have now to request your attention.

Secondly, in regard to the 100 cases under consideration, I have this, also, to remark: not only are they adults and the majority of them old men, but, in point of eligibility and fitness for operation, they fall short, in my opinion, of the average of stone patients afforded by any single district. These cases have been furnished from all parts of Great Britain, and some few have come from distant parts of the world—for example, from India, the Cape, and Canada. For I may, perhaps, be permitted to say, that it has been observed that known experience on the part of an operator attracts a certain number of patients, in unusually bad condition and with large stones, who seek his aid as their last chance of recovery. This fact, complained of by operators at an early time, was never so influential as at present, from the numerous facilities for locomotion now existing; and the effect certainly tends, in a very appreciable degree, to injure the results of practice, if these are to be judged solely by a numerical statement of deaths and recoveries without reference to the severity of the cases.

With these preliminary observations, I will now proceed to state that the following 100 cases have been operated on in about three years and a half; that I have not refused to operate in a single case which has applied to me during that period; that I have employed lithotrity in every instance in which I felt it was safe and prudent to apply it; and have performed lithotomy in the worst possible cases, however bad, rather than leave the patient to the certainty of a painful and lingering death. Further, that I shall submit a table of the cases, as an appendix, which I will not occupy your time by reading; and associated with each case is the name of some gentleman who witnessed it with me, either in consultation or otherwise. Lastly, that in almost every case the stone itself is placed on the table for your inspection.

The following facts respecting these cases may first be noticed. Of the 100 cases, 84, or about four-fifths of the total number, were operated on by lithotrity and 16 by lithotomy. The mean age of the 84 lithotrity cases was 62¼ years; among them were no less than 21 cases of 70 years and upwards, 2 being upwards of 80 years of age. Among these 84 cases there were only 4 fatal cases. The lithotomy cases, 16 in number, had a mean age of 63¼ years. The youngest was 42 and the oldest 80 years. 6 were above 70 years of age, including one each of 77, 78, and 80 years. 6 cases were fatal. Of the entire 100 cases of operation upon unselected patients, having a mean age of 62¾ years, and submitted to either lithotrity or lithotomy, there were 90 recoveries and 10 deaths.

I think I may now venture to assume that these results are successful—perhaps as much so as any similar series of cases which have been authenticated as carefully and satisfactorily as this has been. And I am anxious to promote the habit of thus authenticating cases; not that I have any doubt whatever that any circumstance stated by me to be a fact would be for an instant called in question; but I feel very certain that any operator would prefer that statements of so much interest and importance as those must have which influence surgical practice generally should rest on authority which can be tested, especially as this is quite easy to accomplish, without in the least degree infringing the confidential relations which ought to exist between us and our private patients, and which should ever be strictly respected.

I shall now endeavour to embody the most important of the considerations which are suggested by the study of these cases in four propositions, and shall remark upon each as briefly as possible.

The first proposition is,—That lithotrity is the most successful operation for at least four-fifths of all cases of stone in the adult which come under the surgeon's notice at the present time: a statement which is more definitely expressed in the fact, that the rate of mortality for such cases in this series is barely 5 per cent.

The second proposition is,—That these successful results from lithotrity can only be obtained by performing the operation in accordance with certain rules which can be laid down.

The third proposition is,—That cases of calculus in which one of the two operations, lithotrity or lithotomy, ought not to be employed are exceedingly rare.

The fourth proposition is,—That by exercising an ordinary degree of vigilance for adult patients suffering from symptoms of urinary disorder, every case of calculus may be discovered in an early stage; may be successfully treated by lithotrity; and, consequently, that the operation of cutting for stone in the adult may be rendered obsolete, or applicable only for some very exceptional example which has been developed as the result of extreme neglect or ignorance.

The first proposition—namely, that lithotrity is the most successful operation for at least four-fifths of all the adult cases of stone which come under the surgeon's notice at the present day—is supported, I may say proved, by the 100 cases before us. A rather larger proportion, indeed, than four-fifths was dealt with in that series. This must be regarded as an immense advance on what has been in past time the practice in Great Britain. I doubt whether, if we were to take for any given year all the calculus cases occurring in adult patients in Great Britain, more than one-half would be found to have been submitted to the crushing operation. I think I may safely say that very nearly one-half of the adult cases are still operated on by the knife. At the same time it must not be

* Read before the British Medical Association, at Dublin, Aug. 8th, 1867.

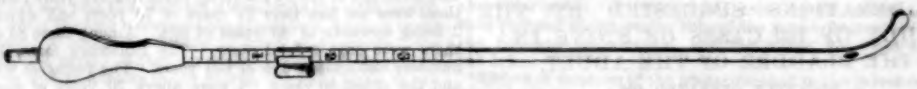
denied that in the hands of surgeons who have not practically studied lithotrity with care, the cutting operation would probably still afford the best results. Yet how immense is the superiority of the crushing operation in practised hands. Four deaths in 84 cases of men averaging 62½ years. I am satisfied that this result is attainable only with considerable experience and very careful attention to all the minutiæ of such cases. Yet the difference is so great that if even a much smaller success only is achieved, it is still superior to any which the knife can accomplish.

The next proposition is that lithotrity can be thus successful only when it is performed on a definite system, in accordance with certain practical rules which experience has determined, and which can be laid down.

But as a necessary preliminary to a very brief consideration of this topic, I would remark that, in every case of stone in the bladder, it is a matter of the highest importance first to make a correct diagnosis of the size and nature of the body which is to be removed, as well as of the constitution and condition of the patient; so that a judicious choice of the appropriate operation may be ensured. I have often had occasion to remark, that more harm may be done, and has been done, by the employment of the two proceedings—lithotrity and lithotomy—without due discrimination, than if lithotomy only had been resorted to in every case.

In making the diagnosis, the first fact necessarily ascertained is the capacity of the urethra. It is not common to find it deficient for the purposes of modern instruments, although it was frequently so regarded when larger and clumsier lithotrites were employed; at most a slight congenital narrowing at or near the external meatus may require a trifling incision to allow the lithotrite to pass with facility.

The size and form of the stone are next to be determined. The kind of sound to be used is by no means a matter of indifference. I should have thought it unnecessary to say this did I not know from experience how many surgeons still use a sound having the form of an ordinary catheter. Such an instrument does not admit of much lateral movement in the cavity of the bladder; while rotation is impossible. Hence it often fails to detect a calculus. An exploring sound should have a short beak, which can be moved with facility in every direction, and which can, therefore, be easily reversed or made to dip behind the prostate into the bottom of the bladder. I have made an addition to this sound, which I have found extremely useful in enabling me to ascertain the size of a calculus without using a sliding blade, or having recourse to a lithotrite for the purpose of measuring. Provided a suitable manipulation is employed, this can be accomplished with a very near approach to accuracy. The mode of using it may be thus described.



Exploring sound, with sliding ferrule and graduated stem, for obtaining the size of a calculus.

The surgeon, having struck the stone, moves the beak of the sound to the further end of it, and slightly taps its extremity. The sliding ferrule is then slipped down the stem till it touches the external meatus. He then slowly draws out the sound, making a series of little taps on the stone as he does so, until he reaches the near end of the stone, and the instrument ceases to elicit a tap, having passed over it. Meantime, keeping his eye on the sliding ferrule, he observes how much of the stem has issued from the urethral meatus during the progress of the taps. This sounding will furnish the length of the stone to one-eighth of an inch, as I have often demonstrated at the bedside in University College Hospital.

If a still more precise demonstration is required, a flat-bladed lithotrite may be introduced; the stone caught at least twice—if possible in two directions—and the measurements noted; and while grasped in the lithotrite, it should be moved about in the bladder gently, when, if another stone exists, it will be struck. This proceeding usually gives rise to more irritation than the method with the sound, but it produces results which are perhaps a little more precise. The note from the stone struck, and the condition of the urine, as well as the condition of the patient himself, will indicate with great accuracy whether the stone is an acid or an alkaline one—a compound of the urates or of the earthy phosphates. The oxalate of lime calculus is much more rare; unless its volume is small, the resistance it gives to the lithotrite will indicate its quality.

In discussing fully the question arising out of the constitution of the patient much time might be occupied, but it will be held to be undesirable to do so here. In few words, a quiet, unexcitable condition of the nervous system, with no extreme susceptibility to feverish attacks, are points in favour of his submitting safely to numerous sittings if the stone be large, and *vice versâ*. The fact of renal disease existing, in my experience, by no means contraindicates lithotrity. Several of the patients in my list had advanced kidney disease, and were passing much constitutional albumen.

Supposing that a uric-acid stone of about an inch and a half in the long diameter is met with, and all the conditions are tolerably favourable, there is no doubt that lithotrity may be performed with a good chance of success. I by no means affirm that such a stone of two inches in the long diameter should not be crushed, but, as a rule, I think lithotomy is the safer operation. The weight of the former will probably be about six to seven drachms. After the weight of an ounce is reached, we arrive at the category of large stones. If the stone is phosphatic, one of much larger size may be treated by lithotrity.

(To be concluded.)

ON THE INHALATION OF THE VAPOUR OF CHLORIDE OF AMMONIA IN ITS NASCENT STATE.

By HERMANN REIGEL, M.D., M.R.C.P. LOND.,
PHYSICIAN TO THE METROPOLITAN FREE HOSPITAL,
AND TO THE FARRINGDON DISPENSARY.

AMMONIA is one of the few medicaments which have been in great favour with physicians from the earliest period of medical history up to the present time; and the favour is well deserved, for the medicament renders very good service in all catarrhal diseases of mucous membranes in general, and of those in particular which line the air-passages of the human body.

To apply this remedy locally was considered a great desideratum by Galen, who ordered his patients to burn pieces of harts-horn, whereby ammonia escapes, and to inhale the vapour arising therefrom. More recent physicians combined ammonia with camphor and other volatiles, and made their patients inhale the mixture, either by placing their mouths directly over a vessel containing the substances, or, as Ducros, Rayer, and Trousseau did, by dipping a piece of lint into liquid ammonia, and keeping it by means of a handle in the mouth, or moistening the soft palate or pharynx with the fluid. This mode of application was practised particularly on patients suffering from asthma, for which disease ammonia was recommended by Van Swieten.

Marshall Hall's experiments have evidently shown that ammonia, by its property of neutralising carbonic acid, is able to prolong animal life. Therefore, he concluded, this drug may not only be applied wherever carbonic acid is produced in a limited space, but seems particularly apt to render good service in cases of secondary apnœa after incomplete suffocation. The experiments of Marshall Hall have been confirmed by Bullock and Ogle.

But it was Alfred Smee who not only gave distinct indications for the local application of ammonia by pointing out the

diseases in which he had applied it with benefit, but who likewise constructed an apparatus for its convenient application. Mr. Smee's paper and woodcut of the apparatus were published in the *London Medical Gazette* of 1843 (vol. ii., p. 59). "The inhalation of so stimulating a gas as ammonia," says Smee, "is well known to be at first sight perfectly startling to those who have never either tried it on their own persons, or never seen it applied by others; but it is really in many cases, with proper management, a simple and one of the most delightful remedies that can be employed." The diseases in which Smee principally used the local application of ammonia were, chronic hoarseness, and old-standing cases of asthma; "especially in those in which the medical man considers that the internal use of the sesquicarbonate of ammonia is indispensable, in which the extremities are cold, the pulse feeble, and the general vital powers depressed, the local application of ammonia is particularly grateful; the patients feeling, as they describe it, a glow after its exhibition, and the warmth first imparted to the lungs extending by degrees over the whole system." Smee likewise recommends the gas as affording great relief and comfort in a relaxed, swollen, and apparently semi-œdematous state of the mucous membrane, which supervenes from remaining in crowded, overheated, and ill-ventilated rooms, where every person not only inhales his own breath over and over again, but is under the necessity of breathing his neighbour's also.

Powerful and beneficial as ammonia is as a remedy, yet it is connected with many inconveniences when applied as vapour spontaneously exhaled from solutions of ammonia. In this state, even if sufficiently diluted, violent symptoms follow each application; and, the gas being rapidly absorbed by the mucous membranes of the respiratory apparatus, the local effect cannot easily be controlled.

A far better plan of applying ammonia to the organs of respiration, therefore, is the one of Dr. Lewin, consisting in making use of the nascent state of chloride of ammonia, in which state it forms a vapour, and can readily be inhaled. But this vapour consists, in fact, of the atoms of a solid body, which, when inhaled, penetrate into the minutest vesicles of the lungs, and, becoming precipitated on the mucous membranes of the organs of respiration, afterwards get absorbed, thus exercising both a local and general effect.

This affords many important advantages. But before enumerating them, it will be necessary to explain the construction of the apparatus which I employ for the above purpose. It consists mainly of three bottles, as used in chemistry for the evolution of gases: one, containing some liquor ammonia, and another, containing some hydrochloric acid—according to their chemical proportions,—are connected with a third, which is about half filled with pure water. From the last bottle the inhaling tube projects. The whole apparatus is put into a box for portability.

The patient raises the mouthpiece of the tube to his mouth and uses it exactly in the same manner as a pipe is used by a smoker. With each draught, ammonia, escaping from the first bottle, and hydrochloric-acid gas, from the second, combine, the moment they meet in the third, to form chloride of ammonia, which gets washed in the water of the last, and deprived of the superfluous particles of the two constituents.

The apparatus, which I had made by Messrs. Krohne and Sesemann, of Whitechapel-road, is extremely simple, and requires no other attention than to renew from time to time the fluids. The advantages of this mode of local application of ammonia are various.

1. The vapour of chloride of ammonia thus smoked *in statu nascente*, may be swallowed or inhaled without any inconvenience: in the former instance becoming absorbed by the stomach; in the latter, being in contact with the mucous membranes of the mouth, pharynx, larynx, trachea, bronchial tubes, and, according to the force of inspiration, it penetrates into the minutest vesicles of the lungs.

2. The vapour being precipitated only after a few seconds' stay in the respiratory organs, it is in our power either to exhale it again after acting for a short time on the mucous membrane, or, by keeping the breath for a few seconds, to allow the vapour to precipitate on the mucous membranes.

3. A deep inspiration being required to drive the vapour forth to the finest air-tubes and lung-vesicles, it is to a certain degree in our power to act only on the pharynx and larynx, or to extend the action to the bronchial tubes and lungs.

4. By altering the proportions of the hydrochloric acid and the ammonia, the latter may be allowed to exist in a free state, and to exercise irritating effects. Should it, on the other hand, be required to deprive the vapour of all superfluous particles of ammonia, it would only be requisite to add some hydrochloric acid to the water in the third bottle; thus establishing two sources for originating chloride of ammonia.

5. If balsamic mixtures or volatiles be added to the water—for instance, essence of turpentine, camphor, &c.,—the efficacy of the smoke may be increased in appropriate cases.

6. The smoking and inhaling of chloride of ammonia is not in the least disagreeable.

It is true that a certain amount of practice is required in order to inhale the smoke well; but this practice is acquired very soon indeed. The effect of these inhalations, in many cases, shows itself very rapidly; and I have seen instances of bronchial catarrh in which relief was felt after inhaling a few times only. Hoarseness, proceeding from a catarrhal state of the vocal cords, has likewise been relieved in some instances in which local application of astringent solutions have been without any effect. Difficult expectoration becomes often soon easy; and the vital capacity increases if it has been diminished by an undue action of the mucous membranes of the organs of respiration.

Finsbury-square, Oct. 1867.

IODINE INHALATION IN THE TREATMENT OF DIPHTHERIA.

BY J. WARING-CURRAN, L.K.Q.C.P.I. &c.

THE amount of interest created by the appearance of my hurriedly written and incomplete paper published in THE LANCET of Sept. 21st, and the inconceivable number of letters received by me relative to it from members of the profession throughout the United Kingdom, rendering it impossible that I could reply to each, individually, as fully as I am in most instances requested, and as satisfactorily as I would myself desire, suggest the supply of another communication in order to convey the information so generally demanded; and, by the selection and history of three of the cases treated, to establish beyond doubt the importance of the remedial agent advocated in arresting the progress of diphtherite membrane in its development, thus robbing the disease of its malignancy, and subduing a mortality hitherto so appalling. Having witnessed the progress of three cases the results of which were very unsatisfactory, considering that every means was had recourse to in order to stay the virulence of the disease, and every method of treatment adopted to afford relief to the distressing symptoms manifested, I was induced to try the effect of iodine vapour in future cases, having some time previously experimented upon, and had the pleasure of observing the beneficial effect it produced in destroying the morbid products thrown out in cases of "pip" among chickens. In none of the three fatal cases alluded to in my paper would (as has since been suggested to me) the operation of tracheotomy been advisable, owing to the false membrane having extended to the bronchi; its performance could only have hastened death, and have reflected little credit on the operator. Nor would "local depletion," as others recommend, "in order to diminish the inflammatory symptoms," have been of much greater efficacy, because of its weakening influence generally, and especially in predisposing the patient to the repetition of fresh exudation.

The formula which I employ for inhalation purposes is the same as that formerly used by Sir Charles Scudamore in pulmonary phthisis—viz.: Iodine, iodide of potassium, of each four grains; alcohol, four drachms; water, four ounces. Of this, for each inhalation, commencing, I take a drachm; add to it a pint of vinegar infused with a handful of dried garden sage, placed in a common inhaling jar, steadily increasing the quantity of iodine solution until I arrive at half an ounce each inhalation. The circumstances of the case, the age and strength of the patient, and the severity or mildness of the attack, guide me with regard to the number of inhalations, and the time occupied by each. For an average case, occurring in a healthy patient, I would say twelve inhalations at least per diem, with eight to twelve minutes (an interval allowed to rest) for each. The loss of valuable time in country practice, occasionally, will not permit the delay of sending and waiting for an apparatus; accordingly not unfrequently I have been compelled to make my inhalation in the following manner:—Having boiled the vinegar and sage, place it in a teapot with a

long spout, and when the patient is prepared to inhale, add the iodine, cover the lid of the vessel with a cloth, keep up the temperature by a spirit-lamp placed underneath, and holding the vessel by the handle, allow the patient to inhale through the spout. Laryngeal irritation is in a great measure prevented by the small quantity at first used, through the patient becoming gradually accustomed to it. In the history of the three following cases, copied from my notes, will be found all the practical information which my numerous respected correspondents require.

CASE 1.—M. A——, aged two years and a half, of delicate constitution, frequently the subject of bronchial irritation and coryza, was visited on January 14th, having been out of sorts the three preceding days. There was tumefaction of the lymphatics of the neck, those in the submaxillary and sublingual regions being perceptibly enlarged, and painful. There was fever; a short, dry cough at times; wheezy respiration; and apparent difficulty of deglutition, the child pressing the larynx forcibly with its hand when attempting to swallow the saliva. On exploring the throat, I found the tongue coated with a slimy mucous fur, the tonsils swollen, and the velum pendulum, uvula, and back of pharynx highly vascular. On pressing the base of the tongue firmly forwards, I observed a rugged piece of membranous deposition in the pharynx low down. I was unable to reach the part satisfactorily with nitrate of silver. Ordered a calomel and rhubarb powder, the bowels being torpid; and to commence iodine inhalation.

Jan. 15th.—The child has spent a restless night. The cough is brassy, the voice croupy; every effort at deglutition causes an amount of pain which the features expressively evince. There is a yellowish-coloured membrane deposited on the left tonsil. I directed the quantity of iodine to be increased to half an ounce each inhalation, and to be used every second hour. Ordered ice *ad libitum*, strong beef-tea, and wine; and the following mixture:—Solution of cinchona cordifolia, half a drachm; white syrup, four drachms; compound spirit of ammonia, a drachm and a half; water, six ounces: one tablespoonful every two hours.

16th.—The child is better. Breathing easier; cough hoarse, but a quantity of mucus has been expectorated; deposit on tonsil unattached in parts, which I removed. The breath is exceedingly fetid, and so are the evacuations. Ordered six grains of mercury-with-chalk, and to continue inhalations.

17th.—There is evident improvement, with relief to general symptoms; but the pulse is remarkably weak.

18th.—Has expectorated false membrane and blood. To continue treatment.

19th, 20th, 21st.—There is gradual improvement, and all danger seems at an end. To decrease the number of inhalations.

25th.—Nothing unusual to note. Patient is still weak. To leave off inhalations, and continue nourishment.

CASE 2.—K. C——, aged nine years, a fine healthy girl, has been complaining for the past few days of stiffness in the muscles of the neck. There is fever; a hot, dry skin; slimy coated tongue; and fetid breath. The bowels are regular, but the urine is scanty. There is a chain of glandular enlargement along the sterno-cleido-mastoid; the submaxillary is swollen to the size of a pullet's egg. On looking into the throat, there is a white pellicular exudation on both tonsils and side of uvula. All the parts are red and swollen; deglutition is performed without pain; there is little cough, but a hoarse voice. To commence inhalation of iodine directly.

Jan. 22nd.—The disease continues without any appreciable change; the appetite is good, and the girl cheerful. The depositions exist as on yesterday.

23rd.—Has been coughing all the night; to-day it is dry and hoarse. The respiratory acts are painful and noisy. Over the anterior surface and apex of the left lung sibilant râles are audible. Ordered an emetic of mustard, which brought away a quantity of laryngeal or pharyngeal mucus, to the relief of the patient. The quantity of iodine to be increased to six drachms, an inhalation every two hours, and a blister over the chest, with a bark and ammonia mixture.

24th.—Is much relieved, having in the night expelled a large piece of false membrane; that upon the tonsil appears shrivelled and devoid of virus, and is still firmly attached by its centre.

25th.—Keeps expectorating portions of membranous deposit; tonsils denuded of abnormal covering, but present a raw, inflammatory appearance. To continue treatment.

26th.—Inhalations produce stridor; to discontinue their employment.

27th, 28th.—Patient rapidly recovering; hearing is imperfect on the left side.

CASE 3.—C. T——, aged eleven years, was seen for the first time on the 25th of January last. The patient has been ill for three days, the relatives thinking it was an ordinary sore-throat, requiring nothing more than domestic attention. The face is waxy; the lips livid; a dark areola surrounding the eyes; the chest heaves perceptibly, and jugular pulsation, denoting serious respiratory embarrassment. The mouth is filled with a clammy secretion; the fetor of the breath is insupportable. There is a discharge from the nose; the tonsils are greatly enlarged, seem to touch one another, and are covered with diphtheritic membrane. To commence iodine inhalation without delay, beginning with one drachm of the solution; brandy and wine every hour, and a tonic mixture.—Evening visit: Expresses himself relieved by the inhalation. The pulse 120; respirations 24 per minute, accompanied by a rattle. Tickled the fauces to induce vomiting, which brought away mucus.

26th.—Tonsils still swollen; membranous deposit darker in colour. Freely cauterised all the parts where it was practicable with nitrate of silver. Iodine inhalations to be increased in number and strength.

27th.—A regular *carte* of trachea has been expelled during a violent fit of coughing, to the marked relief of all the symptoms. Have been enabled to remove the greater part of the abnormal coating of the tonsils.

28th.—The breathing freer; a marked improvement generally; has spat a small quantity of blood; the bowels are rather constipated. To have a mixture composed of dilute sulphuric acid and sulphate of magnesia, with acid infusion of roses; and to continue inhalations.

29th to Feb. 4th.—Progressing most satisfactorily.

I possess notes of seventeen additional cases, the recital of which would occupy considerable time and space; and, as I consider the history of the three cases given will be sufficient stimulus for others to adopt the same line of treatment as that which has proved so successful with me in warring with a virulent malady, and combating so closely with death, I shall conclude my paper on the subject with the hope that iodine will be found eventually by others the specific for diphtheria, which I look upon it to be.

Bexhill, St. Leonards, Oct. 7th, 1867.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

LARGE ANEURISM OF THE FEMORAL ARTERY SUCCESSFULLY TREATED BY COMPRESSION OF THE ABDOMINAL AORTA.

(Under the care of Mr. GEO. LAWSON.)

THE case we have to record is one of special interest just now, from its being, we believe, the first case of aneurism which has been treated in London after the plan first recommended and successfully practised by Dr. Murray, of Newcastle. In this patient there was a slight difference in the routine of the treatment pursued by the above-named gentleman. A Carte's compressor was first applied to the artery; but, in consequence of its apparently failing to produce any salutary change in the condition of the aneurism, Mr. Lawson decided to follow Dr. Murray's method of compressing the aorta under chloroform by applying pressure on it through the abdominal muscles by means of a Lister's tourniquet. On the day, however, preceding the one fixed for car-

rying out this treatment, a very decided change took place in the aneurism. The tumour had increased considerably in density, and the force of its pulsations had materially and perceptibly diminished. Mr. Lawson, however, regarded these changes as most favourable for the success of the new plan of treatment, and accordingly put it in force as he originally proposed.

The following notes of the case were kindly given to us by Mr. Arnott, the surgical registrar of the hospital:—

John L——, aged thirty-six, a stableman, was admitted into the Middlesex Hospital on August 20th, 1867, suffering from an aneurism of the femoral artery of the left leg.

Previous history.—Has generally had good health, and has always worked in the stables. Has never had to use any very great exertion. He has occasionally had rough riding to do, but not during the last twelve months. Eight or ten years ago he had constitutional syphilis, with a bubo in the right groin. Five years ago he was laid up for five weeks from the effects of a kick on the left knee.

History of present illness.—Three months ago he first felt pain in the left knee, extending up the inside of the thigh. He then first noticed some swelling in the left groin, with occasional shooting pains in the part. For the last three weeks he has been confined to his bed, and he has noticed a decided increase in the swelling during the last few days.

State on admission.—A pale but well-nourished man. At a little less than one inch below the fold of the left groin is a prominent oval swelling, three inches and a half long by three inches broad. It is smooth, elastic, and strongly pulsating; the impulse closely following the systole of the heart, and with a distinctly expansile impulse. To the touch it gives the impression of an aneurism with thin walls. Heart's sounds normal. The arteries in the other parts of the body, as far as can be ascertained, are healthy.

Progress and treatment.—On August 21st, Mr. Lawson adjusted a Carte's compressor over the femoral artery at the groin, just above the aneurism, screwing down the pad so as to shut off all but a wave of impulse in the sac. The man bore the pressure very badly, and several times in the twenty-four hours the tourniquet had to be relaxed. He could not endure the pain it produced for more than one hour at a time. The man was ordered ordinary diet, with half a pint of porter daily. He took great interest in the treatment, and after he had worn the compressor for a few days he was able to regulate its pressure himself, screwing it up firmly as long as he could bear it, and only relaxing it every hour or so for a short time when he could not endure it longer. The tourniquet was frequently removed during the night, but replaced in the morning. The tumour, however, altered very little until the end of the sixth week, when it became slightly harder, rather smaller in size, and the bounding impulse was diminished.

On October 9th and 10th there was a very decided improvement in the condition of the tumour; its density had further increased, and the pulsations considerably lessened in force. Notwithstanding these changes, Mr. Lawson decided to adopt the treatment pursued by Dr. Murray of Newcastle, and to compress the abdominal aorta so as to completely arrest the flow of any blood through the aneurismal sac.

On October 10th, at three o'clock P.M. (the bowels having been completely emptied by an enema), the man was placed thoroughly under the influence of chloroform. A Lister's tourniquet was applied over the abdominal aorta, just above the umbilicus, and another tourniquet was placed firmly over the femoral artery just below the aneurism. Mr. Moore took charge of the tourniquet over the aorta, whilst Mr. Lawson kept his finger on the artery just above the aneurism, to watch if any blood passed into the tumour. The tourniquets were kept on for twenty-three minutes; only once at the end of the fourth minute did a wave of blood pass into the sac of the aneurism, when the tourniquet over the aorta was at once tightened; but for the remaining nineteen minutes absolute compression of the vessel was maintained, and no blood entered the tumour. The man now became somewhat collapsed, and began to retch. The tourniquets were then removed and the administration of the chloroform stopped. The pulsations in the tumour were diminished, but they were perfectly regular. It was, however, impossible to say whether the diminution of the pulsations were not due to the collapsed state of the patient. The man was returned to his bed, and the Carte's compressor readjusted over the artery. When the effects of the chloroform had completely passed off, he complained of coldness and numbness of the legs, with soreness in the belly. At seven o'clock in the evening, finding that all pulsation had ceased in the aneurism, the man himself removed the compressor. The house-surgeon was at once sent for, and he found that there was no longer any pulsation in the tumour. Since that time the man has continued to improve. With the exception of some feeling of soreness in the belly, which lasted for about thirty-six hours, the patient suffered no inconvenience from the treatment.

October 17th.—The aneurismal sac is now felt as a hard oval mass; the artery which leads to it pulsates strongly, but all impulse ceases at the upper edge of the tumour.

KING'S COLLEGE HOSPITAL.

REMOVAL OF AN ENORMOUS POLYPOID TUMOUR FROM BEHIND THE PALATE.

(Under the care of Mr. HENRY SMITH.)

A BOY aged seventeen was sent into King's College Hospital on Wednesday, Oct. 9th, by Mr. Bishop, of Tonbridge, in the following wretched condition. He was entirely unable to articulate except in a whisper; his breathing was performed with the utmost difficulty; and when he lay down to sleep, the noise attending the respiratory movement was such as to keep the whole ward in a disturbance. The countenance was anxious, the skin presenting an unhealthy pallid hue; and there were evidences of great hæmorrhages having been sustained.

On seeking for the cause of these symptoms, it was found that there was an immense tumour involving the space between the hard and soft palate and pharynx; in fact, it appeared to be almost obliterating the greater portion of the cavity of the mouth. The soft palate was thrust prominently forward almost to the teeth, and tightly stretched over the swelling. The right nostril was completely filled up by a mass of the growth, and the walls were greatly distended. Repeated hæmorrhages had occurred from the tumour, and, together with the difficulty in breathing, had reduced the boy to the present miserable condition.

The question was as to whether any further delay was of service, as the boy was in such a feeble state. After due consideration, it was thought best to do something without delay. Sir William Fergusson and Mr. Wood recommended the removal of the growth, and accordingly Mr. Henry Smith proceeded to operate on Saturday, Oct. 12th.

He first carefully examined for the attachments of the growth both from before through the nostril and behind the palate, and found he could pass the little finger between the circumference of the growth and the interior of the nostril; and on passing the finger behind the palate, he could feel the circumference of the tumour, which, however, was of much greater dimensions than it first appeared to be. The most dependent part of the mass was seized just behind and below the palate by a strong curved vulsellum, and there firmly held by Mr. Wood who was requested to make steady traction on the mass. Mr. Smith then introduced a pair of powerful polypus forceps through the nostril, and tried to detach the pedicle of the tumour; but, after three or four attempts in this manner, he failed to accomplish his purpose. The boy, at this time, although behaving admirably, was breathing with great difficulty and losing much blood.

Finding this manœuvre to fail, Mr. Smith, after again making a careful exploration with the finger both behind and before, passed the forceps with the concavity forwards behind the palate and underneath the tumour, guiding the instrument, as well as he could do so, with the finger, and then opening the blades as widely as possible, he was enabled to seize the pedicle; and using all the force he could, Mr. Wood at the same time drawing on the lower part of the tumour with the vulsellum, the entire mass was extracted, the cavity of the nostril and naso-pharyngeal passage being found by exploration with the finger to be perfectly free from any growth. The boy was much exhausted, and had a smart attack of bleeding afterwards, which was stopped by the injection of iced water, and he lay for two or three hours in a critical condition; but repeated doses of brandy rallied him, and at ten P.M., when Mr. Smith visited him, reaction had fully commenced.

Oct. 13th.—Has passed almost the entire night in sleep, and is wonderfully well this morning.

14th.—Going on uninterruptedly well; is improving rapidly; breathes easily; and there has been no return of bleeding.

On examination of the tumour, it was found to be of a fibrous nature, composed of several large lobes; and its attachment was by means of a firm and thick pedicle.

Provincial Hospital Reports.

MANCHESTER ROYAL INFIRMARY.

GUNSHOT WOUND OF THE NECK; SEVERE HÆMORRHAGE; LIGATURE OF THE COMMON CAROTID ARTERY; SUCCESSFUL RESULT.

(Under the care of Mr. BEEVER.)

THOMAS G——, aged fifteen, iron-moulder, was brought to the accident-room on the evening of Oct. 16th, 1866, his friends stating that a boy's cannon had been fired at him, and that he was wounded on the chin.

On examination, a small contused wound was apparent, a little to the right of and somewhat below the symphysis menti. A probe was introduced by the junior house-surgeon, but no shot could be discovered; and as the wound was very small, and apparently quite superficial, it was dressed with wet lint, and the boy was sent home.

On his arrival at his own house he became alarmingly ill, and his friends obtained an in-patients' recommendation.

Oct. 17th.—Was visited by a physician's assistant from the infirmary. The patient was then in a highly feverish state, complaining of very severe pain down the right arm. The small wound on the chin nearly healed.

19th.—Patient no better; feverish symptoms somewhat increased; complains of tenderness on the right side of the neck, which is slightly inflamed.

21st.—The neck has become more inflamed and very tender, with a feeling of obscure fluctuation. Linseed poultice ordered.

24th.—A large abscess had formed in the right side of the neck, which was opened, and about two ounces of creamy pus evacuated. Poultice continued.

28th.—About eight P.M., during a severe fit of coughing, hæmorrhage took place from the aperture of the abscess; this was so excessive that the lad's friends stated that it amounted to some quarts; and his state of syncope was so extreme that a neighbouring medical man who was called in pronounced him to be dying.

29th.—Mr. G. E. Legge Pearse, the senior house-surgeon, was asked by the physician's assistant in attendance to visit the patient. He was found to be excessively blanched, and there was slight oozing of blood from the aperture of the abscess. The patient mentioned for the first time that there was a small lump at the back of his neck. This was examined, and found to consist of some hard substance immediately under the skin, a little to the right of and somewhat below the fifth cervical vertebra. Mr. Pearse then made over it an incision, and extracted a small irregular piece of lead about the size of a horse-bean, this being no doubt the original charge of the cannon, which had made its aperture of entry below the chin. Seeing that the boy was in a critical state, he was advised to become an in-patient. This he refused to do; but at six P.M., the hæmorrhage having recurred to the extent of about a pint, he was brought at once to the infirmary and admitted under the care of Mr. Beever. Pressure was applied to the wound, and all was apparently progressing satisfactorily until Nov. 1st, when, while coughing, there was a small escape of blood from the wound. Mr. Beever ordered a consultation to be held on the case for twelve the next day.

Nov. 2nd.—At half-past ten A.M., while the senior house-surgeon was in the ward, the patient made an effort to raise himself in bed, and immediately hæmorrhage recurred to an alarming extent. A clot was first forced through the small aperture of the abscess, succeeded by a gush of arterial blood. This could be controlled by pressure on the carotid. The pressure was kept up by relays of students until twelve o'clock, when he was seen by the surgeons; and it was deemed necessary that an operation of some sort should be at once performed.

Mr. Beever passed a director into the aperture of the abscess, which was immediately beneath the skin, and laid it open. No bleeding vessel, however, could be discovered, probably from the state of syncope to which the patient was now reduced. The wound was now plugged with lint saturated with spirits of wine, confined with a bandage, and ordered to be kept continually wet with spirit.

3rd.—At three A.M., Mr. Pearse was summoned to the bedside of the patient. There was again severe hæmorrhage, the pulse was almost imperceptible, and the boy appeared to be dying. Some blood was still escaping from the wound. Mr. Pearse rapidly removed the dressings, and discovered blood welling up from a great depth. As there was no bleeding vessel which he could secure, he considered it imperatively necessary at once to place a ligature on the right common carotid artery. An incision was made in the skin over the anterior border of the sterno-mastoid muscle, and the artery was tied in the usual manner at the level of the omo-hyoid muscle.

The operation was rendered rather more difficult than usual owing to alteration of the parts by inflammation, infiltration of blood, and blackening of the tissues by styptics. The ligature having been carefully tightened, the wound was closed by wire sutures, and dressed with wet lint. Ten minims of tincture of opium were ordered to be taken every four hours.—Ten A.M.: The patient has been in a state of stupor ever since the operation. Pulse much improved in strength, but still very feeble. Urine and fæces pass involuntarily. There is complete hemiplegia of the left side; facial paralysis also on the left side. There is likewise paralysis of the external rectus of the left eye, and internal rectus of the right eye; pupils equally dilated; temperature of the head the same on both sides. The boy takes nourishment well—beef-tea, eggs, and brandy.

4th.—The patient much the same as yesterday; still remaining unconscious. He was ordered twenty minims of tincture of iron and ten minims of tincture of opium every four hours.

5th.—Passed a restless night, but seems better this morning. No hæmorrhage since the operation. Pulse 150, but stronger; pupils still equally dilated; takes food better. The wound is now beginning to suppurate. Water dressing applied. Ordered fifteen minims of sedative solution of opium at bedtime.

6th.—The patient in much the same condition as yesterday.

7th.—Greatly improved; squint not so much marked. The right pupil is now contracted, and the left dilated; both sensible to light. The wound has been syringed with a lotion of five grains of sulphate of zinc to an ounce of water.

9th.—Wound healthy and granulating; edges approximated; squint almost disappeared; pupils as before.

11th.—The patient can recognise all around him. Squint and facial paralysis entirely disappeared. He has now command over the sphincters.

17th.—The ligature placed on the common carotid has now separated without hæmorrhage, it being the fourteenth day since the operation. There is no return of pulsation either in the temporal or facial arteries on the right side.

From this time his recovery has been uninterrupted. On the 10th of December the wound was perfectly healed, and all dressings dispensed with. Paralysis very much improved, especially as regards the leg. He is now able to sit up in bed, and to eat a chop for his dinner. To take ten grains of hypophosphite of soda and one ounce of infusion of calumba three times a day.

Dec. 20th.—The patient is just able to stand by himself, and was dressed for the first time.

24th.—As he is now so nearly well, and is anxious to spend Christmas with his friends, he has been made an out-patient.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCT. 2ND, 1867.

DR. HALL DAVIS, PRESIDENT.

DR. J. WYNNE HALL, of Barking-road, Essex, was elected a Fellow.

Mr. SQUIRE wished to observe that at the last meeting of the Society he had understood Dr. Wiltshire to say, that although he had made some observations on puerperal temperatures, they had afforded no definite indications, and that therefore he had not given them publicity; but seeing by the journals that Dr. Wiltshire appealed to them as agreeing with

those of Von Grunewaldt and Wünderlich, and therefore disagreeing with his (Mr. Squire's), he wished to draw the attention of the Society to what the difference was. Von Grunewaldt made the mean temperature just after labour in fifty-two cases to be below 99° F., and then to rise progressively; but he (Mr. Squire) showed that the true temperature was not obtainable in the axilla during and immediately after labour, and that therefore the temporary subsidence of temperature that followed had hitherto been unnoticed. In the sudden rise of temperature for the formation of milk, its subsequent subsidence, the very general return to the normal temperature by the seventh day, even to the effect of a cracked nipple in keeping the temperature high, the results he had obtained Mr. Squire stated to agree with the observations of Von Grunewaldt, and that these observations approached nearer the true temperature than those of Wünderlich. How near to these Dr. Wiltshire's observations approximated he was unable to say, but he suspected them to be open to the source of error that it was the object of his paper to remove.

Dr. WILTSHIRE remarked that in the observations he had made on puerperal temperatures he had adopted the same method as Von Grunewaldt and Wünderlich, and had placed the thermometer in the axilla, whereas Mr. Squire had placed it in the vagina; and that this, probably, might account for the differences to which Mr. Squire alluded.

Dr. EASTLAKE exhibited a

DRILL-CROTCHET,

designed by himself, to effect delivery in certain forms of parturition. In the cases in which Dr. Eastlake especially recommended its employment, no other instrument is required. It may, however, be otherwise used as an efficient perforator or crotchet. It consists of a hollow metallic cylinder, to one extremity of which is attached a transverse wooden handle, while to the other is fixed a solid steel trocar point. Through an aperture in the centre of the handle connected with the hollow of the tube, is inserted a steel bar, having at the extreme end a rack, which, acting against a cog-wheel, enables a bifid crotchet to be forced out at any desired angle. The extension of the crotchet, which can be accomplished instantaneously, is effected by pressure on the bar, by means of a button in close proximity to the handle, the pressure in this case being downwards and towards the handle; while, for the purpose of closing it, the pressure must be downwards and towards the point. The application of the instrument is simple. The handle being held in the right hand of the operator, the trocar point is guided through the vagina by the index and middle fingers of the left hand, until it reaches the fœtal head. The trocar point should be then fixed at right angles with the skull, and perforation effected in the usual manner. By this process the cranium can be pierced in a few seconds, and the crotchet then made to act in the manner already described.

The circumstances in which the use of the drill-crotchet is peculiarly applicable, are—(1) where the presentation is natural, the fœtus dead, and the head within reach; (2) where the patient is still in the first stage of labour, and the os uteri sufficiently dilated to admit of the introduction of at least two fingers; (3) where there is an absence of any great disproportion between the fœtal head and the canal of the maternal pelvis, and in the case of a hydrocephalic head, without regard to such disproportion, the use of this instrument only is required; lastly, these conditions being present in any case in which, from any cause, immediate delivery is indicated, such as puerperal convulsions, hæmorrhage, and ruptured uterus, and also in some forms of obstructed labour, due to a cancerous condition of the neck of the womb, or obstinate rigidity of the os uteri. Dr. Eastlake also expressed his conviction that this instrument might occasionally be used with success in those cases in which the head of the child has been separated from the body and left in utero, and, occasionally, also as a substitute for Dr. Oldham's vertebral hook.

Dr. GREENHALGH considered the instrument exhibited by Dr. Eastlake well adapted to the class of cases in which he had recommended its use. It appeared to him, however, that being able to place the crotchet at any angle would prove a great advantage, and the more so if it could be fixed at such angle. Dr. Greenhalgh regretted that the inventor had not endeavoured to adapt his ingenious instrument to all cases requiring the use of the perforator and crotchet.

The PRESIDENT observed that the combination of a perforator and a crotchet, as exhibited in Dr. Eastlake's instrument, might, if modified, be found useful in the minor difficulties of craniotomy deliveries by those operators who were still partial to the use of the crotchet. But, to be safely employed, the crotchet should be rendered less sharp, as there would be—except in the cases of thick skulls—a great probability of its transfixing the cranium, and wounding the operator's fingers. Moreover, the trocar, for safety, required the addition of a canula to guard its point during its passage to the head. Without it, a sudden movement of the patient would expose her tissues to injury.

The PRESIDENT exhibited a large Fibroid Polypus which he had removed by the single-wire écraseur from the uterus of a lady aged thirty-four, who had had six children in India. It weighed nearly a pound, and was pedunculated at its base instead of at its neck to the posterior margin of the os uteri. The neck protruded at the vulva, and the case had been mistaken and treated for descent of the uterus. The disease had existed for about two years; and although it had not occasioned hæmorrhage, it had been attended by pain and troublesome bearing-down sensations, with abundant leucorrhœa, which had enfeebled her health. The patient made a rapid recovery.

Mr. CURGENVEN read a paper "On the Use of Bromide of Potassium in Puerperal Mania." Two cases were narrated in which the bromide of potassium had procured sleep when other medicines had failed, and in which the sleep thus obtained had been followed by a marked subsidence of the mental excitement, and speedy recovery.

Dr. ROUTH read a paper on a case of Triplets. When Dr. Routh first saw the patient, she had been in labour eighteen hours. On examination, the os was found to be completely dilated, the antero-posterior diameter of the brim was shortened by a projection of the promontory of the sacrum, and labour pains had almost ceased. A moderate-sized child was abstracted by the forceps. A second examination revealed the existence of a second child, and, no pains being present, delivery was again accomplished by the forceps. On further examination, the arm of a third child was found presenting, and its delivery was effected by turning. The placentæ were three, each with a separate cord; the parenchyma of two were united. The children all lived, and the case progressed satisfactorily.

Dr. MADGE read a paper on a

CASE OF SPINA BIFIDA WITH TALIPES VARUS.

Mrs. I——, the mother of the child, when a few weeks advanced in her third pregnancy, removed to a new residence, and soon afterwards she met on the stairs a male inmate, whose presence in the house she was not aware of, and who was deformed with a crooked spine and club-feet. The sight of this deformed person, who was making struggling efforts on "all fours" to get up-stairs, made a great impression on Mrs. I——'s mind; and when the child was born, which occurred at the full term, it was found to have spina bifida in the lumbar region and club-feet. When the child was about seven months old it became suddenly ill, and the tumour, from having been translucent, became opaque, and its surface mottled as if from the effects of a blow or fall. The child died in a few days. Mrs. I—— changed her residence, and has since been twice confined, and the children born have been free from deformity. Dr. Madge said he had not brought the case forward to support any particular doctrine, but had merely stated facts as he had found them. He would not venture to say that the powerful impression photographed, as it were, on the mother's mind in this instance had anything to do with the deformity of the child in utero; but he thought, if the occurrence could only be regarded as a coincidence, that it was a very striking one.

Professor LAZAREWITCH, of Charkoff, Russia, read a paper

ON THE INDUCTION OF PREMATURE LABOUR BY INJECTION TO THE FUNDUS OF THE UTERUS.

The author first described the various modes in use for the artificial induction of labour, and showed how their action was limited either to parts remote from the uterus or to the vagina, or to the cervix or cavity of the uterus. He laid down the proposition that the nearer the irritation is to the fundus uteri, the more sure and speedy is the result; and, *vice versâ*, the nearer it is to the orifice of the uterus, the more violent and protracted will be the resulting action. The grounds of this opinion were fully detailed, and proofs given from the practice of the several methods before referred to. The physiology of parturition was considered at some length, with the view of demonstrating that the first step in labour is the separation of the membranes from the uterus; in consequence of this the ovum becomes, as it were, a foreign body, and the uterus begins at once to contract in order to effect its expulsion. Such

being the *rôle* in natural labour, the author contended that our efforts in the artificial induction of it should aim at imitating this process, and such he stated was the effect of his method. Several circumstances appeared to prove that the fundus uteri was much more sensitive than the rest of the organ, and hence the inference that to that situation attempts should be made to excite it to action when labour is required. The author next gave a description of the instrument which he uses for this purpose. It consists of a glass syringe, graduated to fluid measure, and capable of holding about eight ounces of water; the piston being in the form of a double screw, so elongated as readily to work up and down by mere pressure or traction. To the end of the syringe is attached a soft, flexible, metallic tube, about six or eight inches long, which is intended to reach the fundus uteri. This tube is first placed *in situ*. The syringe is then filled and fixed to the tube, great care being taken to secure the exclusion of air from every part of the instrument. When all is ready, the piston is slowly pushed down, and the fluid is injected up to the fundus uteri. Twelve cases were given at great length by the author, and the conclusions derived therefrom were, that in all uterine action was set up, two only requiring a second injection to increase the labour pains. The fluid used was warm water at 28° R. The quantity used was, in four cases, 6 oz.; in one, 5 oz.; and in the remaining seven, 4 oz. In all but one case labour pains began immediately, and continued until it was completed, in from three and a half to thirty-six hours, the mean duration being nineteen hours from the time of injection. In one case only death occurred, and that was in no way due to the operation. Nine of the children were born alive; one was still-born, and two died before the operation. Labour was induced for various reasons, and in all the cases the aim of the operator was wholly or partially attained. In the majority of cases no other preliminary measures were adopted beyond attending to the bowels.

Dr. GREENHALGH said he had listened with great attention to the paper of his distinguished friend, whose absence he deeply regretted, inasmuch as he differed from the author in many of the views contained in his communication. For instance, he was not aware that the fundus of the uterus was more largely supplied with nerves than other parts of that viscus; and until that was demonstrated he was not prepared to admit that that portion of the uterus was more sensitive and more alive to any exciting cause than other parts of the organ. He considered that so far from the fundus being less exposed to irritation than the cervix during pregnancy, it was much more so, owing to the position of the fœtus, and the almost constant movement of its limbs throughout a great period of pregnancy. Upon the assumed greater sensitiveness of the fundus over other parts of the uterus the author appeared to base his recommendation that in the induction of artificial premature labour our endeavour should be to arouse the excitability of the fundus, to which end he recommends the injection of fluid. Dr. Greenhalgh considered that it was far more rational to imitate nature as nearly as possible; and as labour was initiated by certain changes taking place in the neck, which by reflex action caused contractions of the body and fundus, of the uterus, our first aim should be to set up irritation in, and subsequently to secure dilatation of, the neck —a plan he had pursued for many years with the best results. Nor did he consider the injection of water into the uterus unattended with risk. In one case—the only one in which he had had recourse to that method—alarming symptoms followed; and he had been informed by a former president of this Society of another case in which the death of the patient ensued—a lady in whose case he had twice brought on labour prematurely by puncturing the membranes. With the sponge tent, and ergot in repeated doses, he (Dr. Greenhalgh) had never failed to bring on and terminate labour safely. In some few cases where the membranes were very tough he had deemed it expedient to evacuate the liquor amnii after partial dilatation had been effected, so as to expedite labour.

Dr. MEADOWS regretted very much that so little time was left for the due discussion of this paper, which he regarded as one of great value and importance. He believed it would be found that the views propounded by Professor Lazarewitch, in regard to the physiological action of the uterus in the commencement of labour, were more correct than those advanced by Dr. Greenhalgh. He felt convinced that, as regards the uterus in natural labour, contraction of the fundus or of the body, or both, preceded any change in the condition of the os and cervix; and the fact stated by Dr. Greenhalgh, that dilatation of the os was the first apparent sign of the commencement of labour, must, he thought, be regarded as proof of some antecedent action above that part. For it was obvious that contraction of the os and cervix was antagonistic to dilatation. Holding this view, therefore, and believing that separation of the membranes from the uterus and subsequent contraction of its upper part were the earliest steps adopted by nature for the accomplishment of labour, he was inclined to agree with the author of the paper in the practice he had recommended. He could not regard the operation as one involving such dangerous consequences as had been suggested; for he had injected the uterus under these circumstances many times, and had never seen any evil results. He had been struck with the facility with which Professor Lazarewitch's operation could be performed; and he should certainly adopt it when opportunity offered.

Dr. MURRAY and Dr. MARTIN expressed themselves satisfied, from personal experience, both as regards the safety and the certainty of the operation.

MEDICAL SOCIETY OF LONDON.

MONDAY, OCT. 21ST, 1867.

MR. HENRY SMITH, PRESIDENT.

THIS was the first ordinary meeting of the session. The President made a few remarks as to the very prosperous condition of the Society; and begged to thank Mr. Marshall, the treasurer, for his valuable services. He then alluded to Mr. Walter Coulson's resignation as secretary; and, although regretting the circumstance, spoke of his successor, Mr. Francis Mason, as a gentleman of excellent business habits, and one who would work zealously for the interest of the Society.

Thirteen new Fellows were proposed. After which

The PRESIDENT brought before the Society a specimen of the parts removed by amputation of the leg from a lady who had about twelve months since sustained a compound fracture of the ankle-joint. In the course of treatment bony anchylosis, in a most awkward position, had occurred. The limb was rendered quite useless, and he had amputated the leg below the knee. A paper was read by the PRESIDENT

ON THE RESULTS OF THE EXCISION OF THE KNEE-JOINT AT KING'S COLLEGE HOSPITAL DURING THE PAST YEAR.

Fourteen of these cases had been operated upon by Sir W. Fergusson, Mr. Partridge, and the author. Of these, twelve had been quite successful, and two patients had died from pyæmia; in two a second operation had been found necessary, but these both eventually did well. Most of the cases had healed by the first intention; no great shock to the nervous system had occurred. No case had been operated upon for deformity alone.

A discussion of some length ensued, in which all the debatable points in the operation were discussed. No novel question was raised. As in former debates, it was argued on the side of the opponents of the proceeding that, though it must be admitted that there were certain cases in which excision might be properly performed, there was still a doubt as to the exact nature of these cases. In what cases was it preferable to amputation? What were the ultimate results of the operation? If the cases of disease of the joint in which the operation was prohibited were eliminated from the list, in how many of those in which it was performed would rest and other means of treatment have been successful in effecting a cure? This question involved another: In how many cases had the operation been unnecessarily performed? It was admitted by some of the opponents of the operation that it might be performed earlier than it had hitherto been done, and it was not wise to delay its performance to a late period of the disease. It was remarked that in some cases the shortening of the limb had been so great as to render subsequent amputation advisable. The speakers in favour of the operation contended that, in the majority of the cases operated upon, excision was not only justifiable, but to be preferred to amputation; that in most cases a useful limb was preserved; that the mortality resulting from the operation was not greater than that of any other serious operation; that increased experience had rendered the proceeding easier, the cases in which it should be performed more satisfactorily diagnosed, and the parts to be removed more easily determined.

Several patients who had submitted to the operation were exhibited to the Society.

The speakers were Mr. Bryant, Mr. W. Adams, Dr. Althaus, Mr. Weeden Cooke, Dr. Camps, Mr. F. Mason, Mr. A. Ebsworth, Mr. Rogers Harrison, Mr. Trevor, and Dr. Kempthorne.

Reviews and Notices of Books.

Rodent Cancer: with Photographic and other Illustrations of its Nature and Treatment. By CHARLES H. MOORE, F.R.C.S., Vice-President of the Royal Medical and Chirurgical Society, Surgeon to the Middlesex Hospital, &c. Octavo. pp. 128. London: Longmans and Co.

A VERY important subject is that of rodent cancer or rodent ulcer. Much difference of opinion exists in regard to its nature by the few who are really conversant with the disease; and we are glad that Mr. Moore has given to the profession in printed form his views and experience. Mr. Moore, we may state at the outset, appears to have two chief objects in view: the one to show that "rodent ulcer" is in reality a cancer; and the other, that the disease, in its later and more advanced stages, is amenable to successful surgical interference. This latter, indeed, is the practical and most original point in the book; and it is one that deserves immediate attention, since surgeons have hitherto laid it down, as a rule without exception, that operative interference is only to be successfully practised in the earlier stages, before the disease has eaten deeply into the tissues of the part which it attacks. Mr. Moore gives a full and an admirable clinical description of rodent ulcer in its origin and progress.

The contrast between the characters of cancer induration and those of rodent ulcer is well drawn; consisting chiefly in that the latter lack the peculiar character of contractility possessed by the former. The microscopic characters "do not ordinarily so much deviate from the appearances of cutaneous epithelium and of granulations as to be entitled to the epithet 'malignant';" but Mr. Moore differs from some authorities in this matter, for he finds oftentimes in parts of rodent disease elements similar to those of epithelial cancer. It is not usual to find any disease of the lymphatic glands. This is the unanimous opinion of observers. But Mr. Moore calls attention to occasional enlargement, of the nature of inflammation. This, however, subsides, or the gland suppurates; the gland does not remain in an indurated state; there is no true implication of the glands. Mr. Moore sums up very fully and admirably the points of diagnosis between rodent ulcer, lupus, syphilis, and epithelioma. For example, in reference to the first two diseases:

"Lupus begins as a pink, low, tuberculous elevation of the skin; rodent cancer as a firm, uncoloured nodule in it. In lupus there may be more than one tubercle, and the intervening skin may be healthy, or pink, or scaly, or œdematous; the pimple of rodent cancer is solitary. The surface of lupus first scales or peels before it breaks; the rodent cancer excoriates, and then scales or bleeds. Both ulcerate; the lupus at one or at several of its tubercles, the rodent cancer by the more deepening of its central scabbed excoriation. Lupus may cicatrise and cease at any time; rodent cancer proceeds with at most but a temporary and partial healing near its edge. When both are far advanced, the lupus has a superficial appearance, though it have destroyed the whole nose; rodent is precipitous and excavated. Lupus possesses, rodent cancer is without any, contractility. The margin of lupus, though thickened, is low, and bevilled both outwards by œdema and inwards towards the shallow ulceration; that of rodent cancer is firm, and is commonly, in both directions, abrupt. The ulceration of lupus is smooth, and may be multiple, being divided by scars; that of rodent is single and rugged. In the vicinity of lupus there are separate, rather soft tubercles, and an area of pink scaly integument; around the rodent disease the skin is healthy; and if a separate nodule do exist, it is compact, firm, and in great part subcutaneous. Lupus is not invariably limited to the face, but may at the same time appear on the hands or elsewhere; rodent cancer is eminently local and centrifugal."—pp. 21, 22.

With reference to epithelial cancer, we are told that, until infection of the glands facilitates the recognition of epithelioma, there is but little certain in its character to distinguish it from rodent disease. They have alike a solid edge and base limiting a scabbed excoriation or a rugged ulcer, without a distinctive difference of thickness or firmness; but advanced cases could hardly be confounded. The points of distinction are equally well put in this case. Mr. Moore notices an important point in regard to the extension of disease. In rodent ulcer it is equal in all directions; in epithelioma the growth tends downwards, and in two ways, partly, we are told, by transfer of morbid material to the glands in the cervical region, and partly by its more rapid growth on the side nearest the central organs of the circulation—that is, the line of transit to the latter. This Mr. Moore illustrates by the results of operations where, in removing a tumour, he cut through the œdematous tissues on the distal side, and the apparently healthy structures on the proximal side; and the disease returned in the latter and not in the former spot (suffering from impeded circulation). This is of importance in relation to operations. Comparing cancer and rodent ulcer finally, Mr. Moore argues that the latter is composed "of a more feebly vital material," and, therefore, "the occasions are rare in which it imitates the cancerous character, by passing on to a subordinate lymphatic gland." Indications are found in its microscopic history of the presence of cancerous (epithelioma) elements. The comparative facility of extirpation is not regarded as an essential difference. The infiltration of parts around the seat, or recognisable seat of disease, is looked upon as a matter of degree; and so is the usual exemption of glands, upon which those who deny the cancerous nature of rodent ulcer lay the greatest stress, for we are told that "to look upon the power of infecting glands as essential to cancer, would be to confound it with enchondroma or tubercle, which do the same, or even with a bit of tattooed gunpowder." Mr. Moore suggests an explanation for the non-infection of the glands in rodent disease—that it is to be found in the nature of the diseased material itself, which is incapable of growing when transplanted, and the attenuation of the natural textures; so that their absorbent activity is lessened, or there remains little material ready to pass to the glands.

"The rodent cancer is an exquisite instance of a local ailment, being almost uninterruptedly continuous in its growth, from the solitary pimple in which it originates, over an area of half the face. At the same time, however, that it has every local quality of cancer, it is so meagre a growth that it has no superfluous material for circulation in the blood to distant parts, and very little for the lymphatics and the textures nearest to it."—p. 44.

All the above points are fully discussed in the work before us. In addition, a full account is given of the recommended treatment of severe cases, which is a combined method of incisions and caustics. The latter portion of the work is devoted to the narration of cases of severe disease in which, although hitherto generally regarded as hopeless, satisfactory results have been obtained; and photographs and woodcuts are appended to illustrate the clinical reports of the cases.

We have thus attempted to give an insight into the contents of this work, and at the same time to convey information that seems to be much needed. We may not be disposed, perhaps, to widen out the meaning of the term "cancer" so as to include rodent ulcer, but that is not of much importance. Let us recommend our readers to read attentively what Mr. Moore has to say of rodent cancer, and to place the work upon the shelves of their libraries, as the best and most practical one on the subject. We need not add that it is written in a thoroughly philosophic spirit.

A GREAT IMPROVEMENT.—The French law requires that, within three days of the birth of an infant, the latter must be carried to the town-hall to be registered. This, on the score of danger to the health or life of the children, has often been complained of. The mayor of Boulogne-sur-Mer has just decided on appointing a medical inspector, who shall register children at the residence of the parents.

THE

ANALYTICAL SANITARY COMMISSION.

No. III.

ON CLARET, BURGUNDY, RED HUNGARIAN, AND GREEK WINES.

RESULTS OF THE CHEMICAL ANALYSIS OF THIRTY-NINE SAMPLES OF RED WINES, INCLUDING CLARETS, BURGUNDIES, HUNGARIAN AND GREEK WINES.

(*Concluded from page 461.*)

Phosphoric acid.—The phosphoric acid of wine exists for the most part in the combined state, in which it loses the greater part of the activity which it possesses in the free state. Liebig, however, attributes, as is well known, great importance to this acid. He asserts it to be in excess in Hungarian wines; and assigns a superiority thereto on that account. We have, therefore, thought it worth while to determine the amount of phosphoric acid in each of the wines examined. In the Clarets the quantity ranged, in 1000 grain measures, from 0·239 to 0·540, the mean of the whole seventeen analyses being ·357; in the Burgundies, from 0·208 to 0·540, the mean being 0·404; in the Hungarian wines, from 0·298 to 0·465, the mean being 0·352; and in the Greek wines, from 0·296 to 0·316.

The conclusions from these figures are interesting. In the first place, they show that the Burgundies contain on the average rather more phosphoric acid than the Clarets; in the second, that the Hungarian wines exhibit no superiority in this particular, as we have been led to expect. We are inclined to consider that, on the whole, excess of phosphoric acid, like excess of tartaric acid and tartrate of potash, is indicative of the fact that the wine has been made from a larger quantity of grapes. This inference appears to be borne out by the results of the analyses of the Burgundies.

Grape sugar.—There are two principal kinds of sugar—cane and grape sugar. The only one of these proper to wine is grape sugar; but cane sugar is frequently added, as has already been shown, to wine. A great peculiarity of this description of sugar is, that it is convertible into grape sugar under a variety of circumstances—as under the influence particularly of fermentation and the action of acids; and it is from the operation of these causes that after a time, slowly, and it may be not until many months have elapsed, cane sugar added to wine disappears and is converted into grape sugar, which in its turn becomes changed into alcohol, part of which is again broken up, acetic acid or vinegar being ultimately formed.

On analysing a wine, therefore, we may not always succeed in determining the fact whether cane sugar has been added to it or not, as it may have become changed since its addition. Furthermore, the method of ascertaining its presence and amount is by converting the cane sugar, after having ascertained the amount of grape sugar present, into grape sugar. Now it is possible that some of the other constituents of the wine, as the gum, may be at the same time converted also into grape sugar, as well as the cane sugar. This, from analyses we have made of Sherries, we have not found to be the case; but, from the results arrived at in the analyses of the Clarets, Burgundies, and Hungarian wines, it appears to be very probably the case; so that we must not conclude that cane sugar has been added to many of the wines in which "matter convertible into grape sugar" has been found. In the Clarets, the grape sugar varied per 1000 grain measures from 1·47 to 7·27, the mean of the whole being 4·00; in the Burgundies, from 2·26 to, in one sample, 5·78, the mean being 4·40; in the Hungarian wines, from 2·00 to 7·13, which was a somewhat sparkling wine, or excluding this, as should be done, to 4·06, the mean being 2·91; in the Greek wines (of which, however, only two samples were examined), from 6·26 to 6·24.

The above results are interesting, and they show that the Burgundies contain rather more grape sugar (as might have been expected) than the Clarets; that the Hungarian red wines contain much less grape sugar, and the Greek more, than any of the wines tested. From what has already been stated respecting the conversion of cane sugar into grape sugar, it would not always be safe to assume that all the grape sugar found in any wine was really derived from the grape.

Cane sugar or other matter convertible into grape sugar.—The quantities in the several descriptions of wine tested were as follows. In one of the Clarets no cane sugar or other matter convertible into grape sugar was found. In three other samples the quantities per 1000 grain measures of wine were 0·16, 0·24, and 0·29—that is, they were all but free from cane sugar; while in the remaining thirteen samples the amounts ranged between 0·76 and 3·54, the mean being 1·77.

In the Burgundies it was absent in one sample, while in the others it ranged from 0·48 to 2·28; in the Hungarian wines from 0·12, or next to nothing, to 1·59; and in one of the Greek wines it was absent, and in the other only 0·90 was found. Thus in several of the samples, including Clarets, Burgundies, Hungarian and Greek wines, it was either entirely absent or present only in very minute quantities, while in only a few cases was it present in amount at all considerable.

We have already alluded to the opinion commonly entertained that all acidity in wine is injurious; this opinion, as a general and universal one, is, in our belief, as we have already stated, erroneous. In our judgment an equally erroneous view is entertained of the presence of sugar in wine. We apprehend that a little sugar in some descriptions of wine is by no means hurtful in the case of healthy people, whose digestion is not greatly impaired; by the gouty and dyspeptic, no doubt, sugar in wine is to be avoided, as in such habits and states it is apt to generate acid. We have frequently noticed a good deal of inconsistency practised in regard to the use of sugar, and have sometimes observed that people who are afraid of the smallest trace of sugar in their wine do not fail to use it in far larger quantities in their tea, or smother their strawberries or fruit tart therewith. No doubt the kind of sugar makes some difference, and that grape sugar, from being so much more readily decomposed than cane sugar, is the more objectionable of the two descriptions of sugar.

The *albuminous matter.*—Very much has been written on the question whether wine is nutritive or not, the most contrary opinions being expressed, some holding that it is highly nourishing and sustaining, others that it is a mere stimulant; but the reasons given for either opinion have been far from conclusive. Nevertheless, the question is one of which a satisfactory and decisive solution may be given: thus the measure of the nutritive properties of any substance, whether solid or liquid, is determined by the quantity of *nitrogen* therein contained, and a given amount of which nitrogen represents so much albumen, fibrin, or other albuminoid substance, the ultimate composition of which is very nearly identical. We have, therefore, in the case of every wine tested, ascertained the proportion of albuminous compounds present. In the Clarets these ranged, per 1000 grain measures, between 0·68 and 1·35, the mean of the whole analyses made being 1·117; in the Burgundies it varied from 1·16 to 2·16, the mean being 1·575; in the Hungarian wines, from 1·267 to 2·21, the mean being 1·62; in the two red Greek wines examined, the quantities were 0·52 and 1·21.

Thus the Burgundies contained more nitrogen than the Clarets, and the Hungarian wines about the same as the Burgundies.

In every 1000 grain measures, therefore, of the Clarets and Burgundies tested, the mean amount of albuminous matter

present was only 1·334 grains; while in 1000 grains by weight of raw beef there are no less than 207·60 grains of such matter—that is, the quantities being equal, beef-steak is 156 times more nutritious than wine.

These figures clearly demonstrate the fact that the nutritive properties of the wines referred to are exceedingly small; and the same statement applies equally to the Hungarian and Greek wines analysed, and doubtless also, though not quite to the same extent, to the heavier and richer wines, the Ports and Sherries.

Total solids.—The last column of the analyses to which we need particularly refer is that exhibiting the total solid matters contained in the several descriptions of wine. These may be taken to represent roughly the proportion of unchanged grape extract. In the Clarets the solids ranged, per 1000 grain measures, from 18·02 to 23·76, the mean being 20·90; in the Burgundies, it varied from 19·28 to 23·88, the mean being 21·18; in the Hungarian wines, from 16·60 to 25·0, or, excluding the one exceptionally high sample, from 16·60 to 20·08, the mean being 18·52; in the two Greek wines, the solids were 29·32 and 35·14 respectively. The result, so far as the Burgundies are concerned, is singular, and contrary to what might have been expected, since it shows that the difference in the quantity of residual extractive matter between the Clarets and the Burgundies is but slight; the figures given also show clearly that the Hungarian wines contain even less solid matter than the Clarets, while the Greek wines are much more rich in solids than the other wines tested.

Having thus disposed of some of the more salient points connected with the analyses, we have yet to take into consideration the following questions:—First, were any of the wines submitted to examination adulterated? Second, what was their general condition and quality? Third, how is it that the lighter wines agree with the stomach so much better, and are so much more wholesome, than the stronger and more highly alcoholised wines?

With respect to the question of adulteration, we have already explained that the two principal sophistications to which wine is subjected consist in the addition of alcohol and sugar. Now perfectly pure wine contains both these; and, therefore, when the adulterator adds them to wine, he does no more, provided he uses them pure and of good quality, than increase the quantities of two of the normal constituents of all wine. It is true that in general he adds cane sugar; but this, as we have shown, becomes after a time converted into grape sugar; and also that the spirit employed is sometimes far from pure. Seeing, then, that the substances used for the adulteration of wine are nearly identical with some of its normal constituents, it cannot be urged as a reproach to chemistry that it is unable, in general, and by any short and ready method, to determine with absolute certainty whether any wine contains sugar and spirit other than that derived from the grape. Indirectly, by looking at the proportions of the tartaric acid, potash, phosphoric acid, grape sugar, albuminous matter, and total extractive—and sometimes even by direct analysis,—we can arrive at a tolerably safe conclusion; and there are samples in the list we have given in which we believe we should not be far wrong in suspecting the presence of either added spirit or sugar.

With regard to the second question—as to the condition and quality of the wines examined,—we are glad to be able to express ourselves on the whole in very favourable terms. They were sound and wholesome; and although none of them were high-priced wines, many of them were of delicate and superior flavour. Although, as a rule, it may be stated that the quality of the wine, especially as to bouquet and flavour, was in some degree proportionate to the cost, yet to this rule there were many and obvious exceptions. In particular, it will be observed, that the quantity of spirit present bears no relation whatever to the cost; thus Mr. Denman's Gauphine, at only 9*s.* per dozen, is a wine of considerable alcoholic strength.

On the general wholesomeness of light wines, and especially of the Clarets and Burgundies and other red wines of the same class, it is now scarcely necessary to insist; the fact is nearly universally admitted, and to it nearly everybody can add the testimony of his own daily experience. Good sound Claret rarely, if ever, produces headache, fever, thirst, or an overstrained nervous system; it just stimulates the appetite, and promotes, in place of disordering, digestion; it raises, in fact, gently, and within normal bounds, the functions of the body, innervation and circulation. We believe also that the majority of the Burgundies sold are equally wholesome, and we found this belief mainly on the results of the analyses we have given, and which show such small differences in the composition of the two classes of wine that it would not be possible to assign any reason, derived from their composition, why the one class of wines should be wholesome and the other injurious.

The fact of the wholesomeness of these light red wines is now, as we have said, pretty generally admitted; but how comes it that they are so much more wholesome, so much better tolerated by the stomach? We believe that the explanation of the wholesomeness, or the contrary, of any wine is to be found, in the main, in the quantity of alcohol present therein; and that the unwholesomeness increases, as a rule—to which there may be some exceptions,—with the alcohol. We would not, however, be understood as stating that the effects stand in any very exact relation to the amount of spirit, since no doubt these effects are modified to some considerable extent by the other constituents of the wine: there is no doubt that more alcohol can be taken when associated with the components of wine than when mixed only with water. In our view of the matter, the strong wines cannot be drunk in any quantity without producing marked physical effects upon the delicate lining membrane of the stomach itself, irritating and corrugating it, and provoking it to throw out acid and morbid secretions. Most of the port and sherry sold in this country contains spirit enough to preserve the dead human stomach for years from decay, if immersed in it: a fact which alone will serve to show the alcoholic potency of these wines.

THE STATISTICAL, SANITARY, AND MEDICAL REPORTS OF THE BRITISH ARMY FOR 1865.

No. II.

IN our first article we gave a general outline of the subjects embraced in this volume, and entered rather fully into the Statistical Section. We now propose to examine the Sanitary portion of the Report.

It leads off with a description of the various improvements which had been effected during the year under review, and it enumerates the most pressing sanitary requirements which yet remain to be carried out at the various home and foreign stations occupied by our troops.

The progress which has been made is, on the whole, a subject for congratulation. To remedy entirely all the defects, and to provide all the accommodation that is required, must, under any circumstances, be a work of time, involving, as it does, an enormous outlay of money. The new canteen system, which has now been established at most of the stations, has proved a great boon, particularly to the married soldier.

We must take a very rapid survey of the sanitary remarks on the home and foreign stations, and we may begin with Aldershot. The sanitary condition of that camp, as our readers are aware, became the subject of inspection and inquiry by our Commission. The insufficient accommodation provided for the married soldiers was then dwelt upon as a prominent sanitary defect, and this does not appear to be yet removed. The rooms for married soldiers are too small, and quite inadequate to the requirements of a family. Children living under such defective hygienic conditions have to pay the penalty in a liability to

contract, and an inability to contend against, diseases of the zymotic class. We need not feel surprised then at the occurrence of the epidemics of scarlatina and measles which prevailed in 1864, and continued until the end of June, 1865. As a military station Aldershot is remarkably healthy. Enthetic diseases are mentioned as the main source of inefficiency. The anticipations, however, as to the benefits derivable from the working of the Contagious Diseases Act at this camp are likely to be fully realised. A great diminution has taken place there of late in the number of these cases. The origin and progress of this class of complaints are well known in the present day; they are in a great measure within our own control, and there can be no doubt about the wisdom and humanity of the late legislative measures. We hope, therefore, to see the Act applied to all our standing camps and garrison towns as the most practical means of grappling with a great scandal. It appears very like beginning at the wrong end to treat the effects while the causes remain untouched. A more direct and manly way of proceeding in the matter is wanted. It is absurd to provide hospitals and medical attendance for these diseases, among the soldiers at the Curragh Camp for example, while no hospitals are provided for the poor creatures denominated "wrens," about whom one of our contemporaries has been of late instructing its readers.

The information contained in the Reports on the Ventilation and Warming of Barracks, and the Messing and new Canteen System, is of a very practical nature. In the opinion of the medical officers, ventilation by shafts, inlets, and the new pattern grates, as recommended by the Committee for Improving the Sanitary Condition of Barracks, Hospitals, &c., is a decided success, and the same may be said of the new systems of cooking and canteen.

The Reports on Foreign Stations are generally very short. There is a great amount of sanitary improvement designed and promised, and but little effected, as far as we can see, since the previous year. Those from the Indian Presidencies are able and elaborate documents, which do not admit of being curtailed with fairness to the writers. When we remember that the permanent force in India is between 60,000 and 70,000 men, the importance of sanitary measures there is obvious.

The Special Reports are among the best and most instructive features of these volumes. Dr. Parkes's contribution contains, as he says, an epitome of the most salient points in the progress of hygiene during the year, and its interest is not by any means limited to the medical officers in the army. Dr. Parkes regrets that the Committee, appointed by the Poor-law Board to consider the whole question of the amount of cubic and superficial space necessary for the sick in workhouse infirmaries, did not come to any decided conclusion, and give an authoritative expression of an undoubted scientific truth as to the hourly amount of air required per head. He refers to Dr. de Chaumont's labours as being in perfect accordance with those of Prof. Darkin, to whom the Workhouse Committee referred the subject. He speaks of the papers by Dr. Randall and Mr. Holmes on the prevalence of disease and mortality in the different workhouses as especially valuable in removing an impression caused by erroneous statistics. It has been shown that the mortality is very small in the maternity wards of the workhouses. Owing to the fact of these wards being scarcely ever fully occupied, the average cubic space per head is practically extremely large, being, in thirty workhouses, no less than 2800 cubic feet per head; and, in addition, the wards are often empty, and there is time for purification to go on. The remarks on the chemical analysis of drinking-water are good. The quantitative determination of the dissolved organic matter in water is in an unsatisfactory state, and an easy process adapted for hygienic purposes remains a desideratum. On the whole, Dr. Parkes believes that careful incineration and the use of the permanganate of potassium are still the best available means for giving an approximative idea of the amount of organic matter in water.

Dr. Parkes discusses very freely the fungoid theory of cholera in relation to the specific cause of that disease. He thinks that a fungus does really and invariably exist in cholera dejections. He refers to his paper on the subject, published in the *London Journal of Medicine* in 1849; although he did not then suspect their fungoid nature, he was perfectly certain they were not epithelium or mucous corpuscles. Dr. Parkes was perfectly familiar, he says, with all the facts described by Klob and Thomé. He found these bodies in every stool he examined in 1849 and 1854, and again in 1865 and 1866. Although the phenomenon of fungoid growths is, as many have pointed out, singularly accordant with the spread of cholera, he does not consider it safe at present to express a decided opinion that they are the true cause of it.

Dr. Parkes cites some very strong cases in favour of the spread of cholera by intercourse; he goes into the question of the influence of drinking-water in the production of the disease; and he indicates very clearly that the dangerous period of the choleraic stools is that at which they become alkaline—ammoniacal. As might be expected in a paper on practical hygiene, he points out the best means for keeping the excreta acid and preventing those changes which evolve their poisonous character. The use of carbolic acid occupies a prominent position among the agents he recommends. Dr. Sanderson's very original and able experimental investigations, which we have already laid before our readers, carry our knowledge of cholera far in advance of what it was previously, and place it upon a scientific basis.

We shall be much mistaken if the very ably written Report on the Prussian Army, by Surgeon-Major Dr. Bostock, Scots Fusilier Guards, does not attract attention. It embraces so many subjects, and discusses them so well, that we can only regret the more that the writer of it did not arrive in Prussia until "the King's army had for the most part left the theatre of war," and that the chief object of his visit therefore failed. We would gladly run through the various topics touched upon in this contribution, but we commend Dr. Bostock's remarks to the attention of those who are considering the expediency of an alteration in the soldier's pack and equipment.

Dr. Mackinnon's narrative of the late war in New Zealand, embracing the sanitary history of the force, is a full and able document. The entire absence of any malaria, and the very salubrious nature of the soil and climate of New Zealand, may be ranked amongst the chief causes of the remarkable health of the troops employed; but their exemption from all those zymotic forms of disease, which commonly play so important a part in causing the inefficiency of armies in the field, may be fairly referred to the foresight and skill exhibited in the sanitary arrangements. Dr. Mackinnon enjoys a good reputation as a zealous surgeon and skilful operator, and he made great use of these accomplishments in New Zealand. We congratulate him on the possession of the honours which he earned there.

Dr. de Chaumont's labours on Ventilation &c. are well known. By these he has contributed, in a great measure, towards placing the whole subject upon a scientific basis. His contributions to the present volume possess the merit of scientific accuracy. We perceive that some original experiments have been devised and applied by him and some of the medical candidates for testing the quality of air as to the presence of organic matter; this was effected by drawing the air through solutions of permanganate of potash by the aid of aspirators.

We are compelled from want of space to curtail our remarks to the utmost, and to leave other and valuable papers unnoticed; these our readers must examine and digest for themselves.

MEDICAL REGISTRATION IN PARIS. — It has just been decided that an accurate register for 1868 shall be prepared in Paris, containing the names, qualifications, &c., of all persons practising in Paris and the Department of the Seine.

THE LANCET.

LONDON: SATURDAY, OCTOBER 26, 1867.

A CORRESPONDENT has called our attention to the effect of the gratuitous practice at hospitals upon professional remuneration in London, urging, what has repeatedly been urged before, that hospitals are thronged by persons well able to pay for medical and surgical attendance, and that private practitioners are unable to compete with so-called charitable institutions, officered by men of repute. Indeed, no one can be surprised that even some people of affluence should prefer to go to an hospital, at which the combined skill of the most distinguished members of the profession can be obtained for nothing, than to enter the consulting-room of an ordinary practitioner who expects his fee. It is, however, much easier to state and even to believe a proposition of this general kind than to prove its truth. No charitable institutions are perfect, and the mere existence of occasional abuse would scarcely justify the cry of professional interests being in danger, or prove the necessity of calling upon the governors of medical charities to alter a system of administration which is regarded by the public as a great success. Nor must it be forgotten that the very existence of the institutions now complained of is mainly due to the energy and philanthropy of medical men. It is through their representations that the public have been made acquainted with the wants and sufferings of the sick. It is they who have demonstrated the value of this particular form of charity, and have so organised it as to confer advantages not only upon the poor, but upon the rising members of the profession, and through them upon the rich themselves. More than half of the existing institutions which receive in-patients have been established in the present century, and owe their existence to members of the profession, many of them having been founded by the exertions of single individuals; whilst there is scarcely a dispensary which is not largely supported by the efforts of its staff. And now that the public have responded so nobly to the call, and abundant provision has been made for the efficient treatment of every form of sickness, it would be a pity to lay ourselves open to the charge of grudging that which we have done, and to alarm the prejudices of the benevolent public, and thus seriously injure the charities whose efficiency, and not destruction, we should desire to serve.

But, in reality, the question of indiscriminate, and, so to speak, irregular and imperfect charity, whether medical or otherwise, affects the public interests even more closely than it does those of the medical profession. Nothing is more demoralising than to do for any man that which with ordinary prudence he ought to accomplish for himself. Sickness is an accident of life to which all are subject, and against which provision should be made with the same forethought as is employed against cold, hunger, or old age. If, therefore, our hospital system has the effect of teaching the industrial classes to rely upon charity for advice and attendance, and not upon themselves—if it makes them forgetful of the fact that sickness will certainly arise, and induces them to regard it as a hardship to nurse their relatives and children, the sooner the system is changed the better it will be for the entire community.

Nor is the question less important to the benevolent who subscribe the funds. It is without doubt desirable that their alms shall be wisely and economically expended, so as to secure the largest amount of good at the least possible expense. The subscribers have a right to demand that the patients who apply shall be fitting objects of charity, and whilst too close a scrutiny into their previous history is not to be desired, since whatever repels the impostor repels the deserving poor with even greater certainty, there should nevertheless be sufficient inquiry to secure that the resources of charity shall not be trenched upon by those who ought to pay.

Further, setting aside the question of pecuniary loss and injury to the general practitioner, it is important that the time, energy, and skill of the professional staff of our hospitals and dispensaries shall not be wasted in desultory and imperfect work, but applied with such helps and such economy as may present a reasonable prospect of affording benefit to the patients and satisfaction to the staff themselves.

From these considerations it is evident that mismanagement of our medical charities will not be established by the proof of occasional abuse. It will not avail us to give authenticated cases where ladies and gentlemen have dressed for the part of patients, and, having driven in their carriages to the neighbourhood of the hospital, have entered the consulting rooms in dirty company. Nor does the appearance or occupation of the patients afford us any satisfactory evidence that they are imposing on our bounty. There are pitiable objects to be found in every station in life who have the strongest title to gratuitous attendance; and it would be hard indeed to say that the charity of an hospital is ill-bestowed simply because the social standing of the patients seems to be superior to what is found elsewhere. The patients reflect the character of the population of which they form a part. It would be ridiculous to compare the patients of St. George's with those of the London Hospital. In the district of St. George, Hanover-square, 37 of every 100 women over twenty years of age are employed in domestic service; whilst in Bethnal Green only 6 would be so engaged, and 9 in St. George's-in-the-East. Hence we should be sure to find more female domestics in St. George's Hospital, and this notwithstanding that those of the rich western establishments are more likely to be independent than those in the poverty-stricken districts of the east.

Still, the questions remain — Are the medical charities of the metropolis seriously abused? and, if so, What is the general effect upon the poor, the public, and the general practitioner? In order to answer these important questions it would seem necessary to determine the classes of persons for whose benefit the institutions were designed, the probable number of those who ought to be relieved, and the amount of accommodation and assistance they might reasonably require. We might then examine the extent to which medical charity is given, and so be able to say whether it is in excess of the reasonable requirements of the population.

NOBODY will be surprised to hear either of the discovery of a new anæsthetic or that the discoverer is Dr. RICHARDSON. Of all discoverers, Dr. RICHARDSON is the most prolific.

True, he has to discover sometimes that all his conclusions are not right—in other words, that his discovery is a false one. But this is one of the hardest discoveries for a man to make; and Dr. RICHARDSON, to his credit, made it lately, in reference to the cause of the coagulation of the blood. Yet his investigations are always of the highest importance, and most suggestive in their bearings upon practical medicine. Every man has his weak point, and we would just hint to Dr. RICHARDSON, out of our regard for his genius, that he is somewhat apt not thoroughly to complete one discovery, and make sure of its being a real one, before hastening in search of another. A short time since we were all gratified by Dr. RICHARDSON'S announcement of a device for the production of local anæsthesia. This was a real discovery. There can be no doubt about the fact. But the utility of the method, the extent of its applicability, and the objections to its application, are still matters upon which there is a great difference of opinion. The difference can only be removed by evidence from all quarters, the collection of which would be the completion of the discovery; and Dr. RICHARDSON could do no greater service than collect this evidence. He seems disposed to leave—not so unreasonably certainly as in the case of the coagulation of the blood theory—the merits of local anæsthesia to be determined by experience and time. A week or so ago he gave an account of the last discovery which he has made. Dr. RICHARDSON will not understand us to be writing otherwise than in the most friendly spirit either of him or his discoveries. It is because we are impressed with his talent for discovery that we wish to see the most made of it. We are anxious to get the greatest amount of good and the least amount of disappointment out of it. So while we should like to chain Dr. RICHARDSON down to the completion of one or two practical discoveries, we must take his contributions to science as he pleases to give us them.

His last discovery seems a real one, and it may prove to be important: the anæsthetic power of the bichloride of methylene—a fluid like chloroform in appearance and odour, but differing in its boiling point and its specific gravity. The bichloride of methylene boils at 88° Fahr., and has a specific gravity of 1·34; chloroform boils at 142°, and has a density of 1·49. This substance has chemical relations also with tetrachloride of carbon, the anæsthetic properties of which are known. Chemically speaking, the bichloride of methylene is constructed from the organic radical, methyl, represented by $C H^3$, by the withdrawal of one atom of hydrogen, giving methylene $C H^2$, and the addition of two of chlorine—thus, $C H^2 Cl^2$. The composition of chloroform is $C H Cl^3$. It differs from the bichloride of methylene in having one atom of hydrogen less and one atom of chlorine more in its composition. The radical methyl may enter into composition with chlorine, giving rise to the chloride of methyl, $C H^3 Cl$, which was discovered in July to have gentle anæsthetic properties by Dr. RICHARDSON. We have, then, a series of compounds, C H H H Cl (chloride of methyl), C H H Cl Cl (bichloride of methylene), C H Cl Cl Cl (perchloride of formyle or chloroform), and C Cl Cl Cl Cl (tetrachloride of carbon), all of them anæsthetic, Dr. RICHARDSON having discovered the anæsthetic properties of the first of these in July last, and of the second in August. That gentleman has experimented on himself and on animals with these new anæsthetics; and two cases of ovariotomy in the practice of Mr. SPENCER WELLS have apparently proved satisfactorily the anæsthetic power of the bichloride of methylene, which, as it is intermediate in composition, Dr. RICHARDSON regards as also intermediate in strength between chloride of methylene and chloroform. The anæsthesia induced by the bichloride of methylene in pigeons comes on with less struggling than in the case of chloroform; it is more prolonged and quiet, and the recovery from it is quick. In an animal killed by it, both sides of the heart and the lungs contained blood. Dr. RICHARDSON has drawn the following conclusions:—

"In its action the bichloride of methylene is more gentle, but as effective as chloroform; it produces less struggling and less vascular excitement. Its narcotic effects are equally prolonged. It acts very uniformly on the nervous centres. It produces sometimes vomiting. When it is carried so far as to kill, it destroys by equally paralysing the heart and the respiration. It interferes less than other anæsthetics with the muscular irritability."

Dr. RICHARDSON expects that it will prove less fatal than chloroform, which causes death, he estimates, once in fifteen hundred cases. He is very right, however, in speaking diffidently on this point, for there are no facts to justify confidence.

PAST experience may reasonably lead us to hope and believe that this year will now pass away without the presence of an epidemic of cholera in England. The appearance of this disease, during the autumn of last year, roused to action the "cheese-paring" and apathetic element of metropolitan boards and vestries, and it is probable that more rakings out of pestiferous abominations took place in London between July and November of 1866 than at any previous period in the sanitary history of this great city. But the danger is past, and the summer is ended, and many of the good resolutions made last year, when death was at the door, are now cast to the winds and utterly forgotten. A reference to the pages of THE LANCET of last year will remind our readers that the anomalous and absurd regulations then, as now, in force respecting the sanitary governance of the Thames, are not only useless, but highly dangerous to the health of the City, as well as of the river, population. It suffices to recall attention to the fact, that, for purposes of health, the Thames is (or is presumed to be) under the charge of the officers of those districts through which it flows, so that between Fulham and Plumstead this responsibility is shared by no less than fourteen medical officers of health. The fortnightly statistics presented to the City Commissioners of Sewers show that their medical officer has been fully alive to the necessity of dealing with this question, and that he has, for some time past, employed an inspector to watch over the shipping moored in the City district. But, as was very pertinently asked by our contemporary, the *Pall-Mall Gazette*, some days ago, "Where are the river inspectors of *other* districts on which the river abuts? Do they exist? and, if not, why not?" We have good reason to believe that they do not exist; that this duty, moreover, cannot be properly performed by the medical officers themselves in conjunction with their duties on shore, and that the work of an inspector, how well soever performed in one district, is utterly futile, unless a similar surveillance be carried on throughout the whole of the districts above mentioned. For floating craft, unlike houses, can be moved and moored easily enough, and the unregenerate bargeman who

objects to cleanliness on principle, may now bring up in any lawful part of the river without sanitary molestation, if he do but keep out of the tiers of shipping on the north side, between London-bridge and the Tower. This is one of the many harmful effects of local self-government, and we may fairly presume that its evil results would have been painfully exemplified last year, had not a regular system of ship-to-ship visitation on the Thames been performed by the staff of the Seamen's Hospital Society, under the management of its surgeon, Dr. Rooke. The evil is patent, the remedy is plain, and it is the imperative duty of those who represent the Government on the Board of Thames Conservancy to induce legislative action that will enable that Board to take the sanitary, as well as the administrative, charge of this port. It is believed that the conservators are willing to take an active part in this matter, and it is certain that they could in many ways utilise the services of a competent medical officer. But, as a proportion of all dues collected by them is handed over to the Government, it is necessary that the latter should assist in making the requisite financial provisions. The matter, indeed, should be advocated officially by those conservators who are specially appointed to represent the Admiralty and the Board of Trade. We earnestly recommend this very simple question of sanitary reform to the consideration of the Government during the ensuing session, and can confidently affirm that any Bill required for its consummation will have the cordial support of all commercial men and politicians.

Medical Annotations.

"Ne quid nimis."

THE PROFESSORSHIP OF ANATOMY AND SURGERY AT THE COLLEGE OF SURGEONS.

We regret to find that the proposed alterations in the College professorship have fallen to the ground, and that the report of the committee appointed to consider the subject has been summarily set aside. At the meeting of the Council of the College of Surgeons in August the names of four candidates for the chair vacated by Mr. Hancock were announced, and on Thursday, the 17th inst., the election was in due course proceeded with. A section of the Council was desirous that the professor should be selected from amongst the Fellows of the College outside the charmed circle of the Council itself, and suggested that it would be both judicious and fitting that a course of lectures on one of the so-called *special* branches of surgery should be delivered within the College walls. Ophthalmic Surgery was mentioned as a subject at once of interest and of great modern progress, and, moreover, one which had not been touched by the College professors of late years. Had the proposition been carried we believe that Mr. Hulke would have been selected for the post, his name having been put in nomination; but the other two names having been withdrawn, a division showed that a majority of the Council is still determined that all posts of honour or emolument shall be enjoyed by members of the Council only, and the election of Mr. Le Gros Clark was therefore carried.

Thus it appears that liberality is vanishing and progress diminishing at the College of Surgeons. When men like Green and Brodie and Stanley were in the ascendant, distinguished Fellows, non-members of the Council, were appointed to the professorship, and thus we find the names of James Paget from 1847 to 1852, and Prescott Hewett from 1854 to 1859 attached to the honourable post. Without in any way disparaging the last four eminent occupiers of the chair, we will venture to say that at no period were the College lectures better attended or more attentively heard than during the incumbencies of the gentlemen we have named.

We understand that the new professor will in all probability make the important question of "Surgical Diagnosis" the subject of his course; and we doubt not that Mr. Le Gros Clarke's great experience, and especially with regard to visceral lesions, will render his lectures both instructive and interesting.

A SERJEANT-SURGEON'S OPERATION.

By the accidental force of circumstances, it fell to Sir Wm. Fergusson's lot to inaugurate his new commission, so to speak, by an operation on Saturday last of a magnitude and importance well worthy of a master-hand. For the second time, in the crowded theatre of King's College Hospital, the whole of the upper extremity, including the scapula and a part of the clavicle, was removed with a facility and bloodlessness which must have indeed surprised the numerous spectators, amongst whom were representatives of the surgical staffs of many of the London hospitals. The patient, a stout hearty man, who had come from the antipodes to seek relief from his sufferings, presented a large tumour of the left scapula, which implicated the upper part of the humerus and pushed forward a projecting mass into the axilla. It was a case in which even the apostle of conservative surgery was fain to allow that nothing less than the removal of the entire limb offered a prospect of success, and in this respect resembled the case of the young woman reported in The Lancet of Nov. 25th, 1865, but with the difference that in that instance Sir William Fergusson had already removed the greater part of the scapula by a previous operation.

As the case will be published in detail, we will only remark here that the operation was accomplished by dividing the clavicle through an incision made over it; and that, the patient being then turned on his side, the skin was rapidly reflected from the scapula, which was then dragged *forward* much in the way in which removal of the upper extremity is performed in the dissecting-room. The vessels, being now fully commanded by an assistant, were divided, with the brachial nerves, and the limb separated by a few rapid strokes of the knife. Notwithstanding the gravity of the mutilation, the patient, on awaking to consciousness, was unaware of any operation having been performed, and waved an adieu to the spectators as he was carried from the theatre.

Though all appeared to promise well, we regret to hear that the patient has sunk, notwithstanding the solicitous care bestowed upon him. Those who witnessed Sir William Fergusson's former case of a similar kind may remember how poor seemed that feeble woman's chance of recovery as contrasted with that of the strong man on the present occasion; but so it is too often, unfortunately, in operative surgery—*l'homme propose et Dieu dispose*.

It would be improper were we, in such a notice as the present, to omit to mention the able way in which the operator on this occasion was seconded by his assistants—especially Mr. Wood and Mr. H. Smith. It is not in every operating theatre, we regret to say, that order and quiet, coupled with attention to the requirements of the surgeon, and as far as possible of the spectators, are to be witnessed in the same degree as in the theatre of King's College Hospital.

CURIOUS EPISODE OF THE CATTLE PLAGUE.

Not long since, Mr. Nunn, surgeon to the Middlesex Hospital, was applied to by a large dealer in calves' heads and neats' feet for advice under the following circumstances. Since the occurrence of the cattle plague the workmen employed in preparing the neats' feet had suffered very severely from a

peculiar kind of inflammation of the skin of the hands. This created alarm almost amounting to a panic, the belief being that, in some way or other, the cattle plague poison was contaminating the systems of the workpeople. Mr. Nunn found, on examining some of the hands, that the local symptoms were sufficiently severe to justify alarm. The skin at the root of each nail was completely denuded of epithelium, was red, swollen, and sensitive, so much so that the eventual shedding of the nail seemed inevitable. Between the clefts of the fingers, and to a certain distance above the wrists, were numerous angry-looking pimples, whilst the skin of the hand generally was inflamed and somewhat thickened; but there was neither inflammation of the lymphatics nor the slightest constitutional disturbance. Mr. Nunn visited the establishment and found that the neats' feet, on their arrival from the slaughter-house, are soaked for a certain time in water, and then scalded, so that the hair and hoofs may be removed. In this way a beautifully clean, rosy-tipped preparation is produced, which is used for boiling down into jelly and soup, and for other food purposes.

How could the alarming symptoms be accounted for? This seemed very difficult. In the first place, carcases of animals affected with cattle plague could not find their way to market, and no unusual appearance had been detected in the feet upon which the workmen had been employed. On the other hand, the special inflammation of the roots of the nails and skin had never been previously observed, whilst the processes to which the feet were subjected were, it was said, precisely the same as those used from time immemorial. Whence then was derived the irritant which was causing so much suffering? Mr. Nunn concluded that, since, in accordance with official regulations, all cattle-trucks and lairs were purified with lime or lime-wash, the carbonate of ammonia derived from the manure with which, as a rule, the animals' feet are covered, would be converted by the lime into caustic ammonia, and this being dissolved in the water used for cleansing the neats' feet would certainly act injuriously on the workmen's hands immersed in the water. Mr. Nunn therefore directed that bowls of common brown vinegar (which, by law, contains a small percentage of sulphuric acid) should be placed in the work-sheds so that the men could from time to time rinse their hands with this fluid, and that glycerine should be provided with which they might cover their hands on leaving work. The plan was entirely successful.

THE "DREADNOUGHT" AND GREENWICH HOSPITAL.

THE copy of a letter addressed to the Lords of the Admiralty by the Seamen's Hospital Society has been forwarded to us for perusal. It reviews in detail the many aspects of this vexed question, and may be considered as an *ultimatum* on the part of the *Dreadnought* authorities. For it appears that the Committee of the Seamen's Hospital Society have employed an architect to examine Queen Mary's quarter and report thereon; and it is found that this part of Greenwich Hospital cannot be utilised for the purposes of the Society until no less than from £25,000 to £27,000 shall have been spent in readjusting its internal arrangements. The Society complain that no opportunity was afforded them by the Admiralty of forming any estimate as to the probable cost of conversion of Queen Anne's quarter; and it is also stated in the letter above-mentioned that the utilisation of the north and south wings of this quarter for strictly hospital purposes was entirely overlooked by the Government arbitrators in giving their decision as to the relative merits of each quarter for the purposes proposed. The *Dreadnought* authorities decline to spend the above sum on the conversion of a building in which they would be but tenants at will, and regret that the kind consideration of their claims by the Prime Minister on the 4th of March last cannot, under the present decision of the Admiralty, take effect. Queen Mary's quarter is therefore definitely declined by the Seamen's Hospital Society. But the expense of building may yet be averted, should the forthcoming report of Mr. Ducane's committee result in the total emptying of Greenwich Hospital, and so give the Admiralty an opportunity of offering the use of the infirmary to the *Dreadnought* authorities.

In viewing this as, in all probability, the last of a long series of notices, we may take leave to observe that all those interested in the Seamen's Hospital Society have good cause to appreciate the constant and unremitting exertion of the secretary, Mr. Kemball Cook, whose labours on behalf of our merchant seamen have been, in this matter, by no means light or agreeable.

THE NEW SURGEONS-EXTRAORDINARY.

WE were enabled last week to announce the appointments of Mr. John Hilton and Mr. Prescott Hewett to the posts of Surgeon-extraordinary to Her Majesty, vacated by the promotion of Sir Wm. Fergusson and Mr. Paget—and their appointments were duly gazetted on Tuesday last. Whilst congratulating both gentlemen upon the honours thus worthily bestowed, we venture to congratulate also the medical advisers of the Queen upon the selection they have suggested. Mr. Prescott Hewett, from his position at St. George's Hospital and his professional relations to members of the aristocracy, and latterly of the royal family, must have been well known to those connected with the Court; and his kindliness of disposition, no less than his well-earned reputation, cannot but have recommended him for the office he has received. Mr. Hilton, on the other hand, though well known in the world of Science and Surgery, has, from accidental circumstances, become the leading authority in a quarter of London somewhat remote from the neighbourhood of the Court, and it was but right that the claims of one of the leading surgeons of such a great institution as Guy's Hospital should receive recognition; and when we remember that since the palmy days of Astley Cooper and Aston Key it has been rather "left out in the cold" as regards royal favour, it was time that such a recognition should be made. No more fortunate moment could have been chosen than the present, when Mr. Hilton occupies the President's Chair at the College of Surgeons. However we may view the conduct of the College authorities in matters of detail, the fact remains unquestioned that the Presidential Chair in Lincoln's Inn is the highest post to which a surgeon can aspire, and it was never more worthily filled than at present.

BUST OF SIR WILLIAM LAWRENCE.

THE Council of the College of Surgeons has resolved to purchase a bust of their late colleague, Sir William Lawrence, to be added to their collection of surgical celebrities which ornaments the hall and staircase of the College. It has been determined to give the commission to Mr. Weekes, R.A., who, it may be recollected, exhibited a marble bust (for which Sir William gave several sittings) at the Exhibition of the Royal Academy of Arts of this year, and it is this very bust which is shortly to become the property of the College.

Matters of artistic detail are always fruitful sources of dispute, and no public or private memorial escapes hostile criticism. It is perhaps hardly fair to posterity to give it a likeness of Lawrence in his dotage, when all the fire and spirit which formerly animated that handsome countenance had been quenched by age. For our own part we would have preferred a copy of the bust by Behnes, which ornaments the library of the Medico-Chirurgical Society, and which represents him in full bodily and intellectual vigour.

SANITARY WORK IN PADDINGTON.

IN his Annual Report for 1866 the concluding year of his duties, as Medical Officer of Health, Dr. Burdon Sanderson calls attention to the unusual progress which has been made during the year in the sanitary administration of the parish of Paddington.

Important works of house improvement have been successfully completed; many standing nuisances have been abated, and the offensive trades carried on around the Canal Basin have been subjected to wholesome regulations. The powers long possessed by the vestry under their Local Act have been applied in a new and most effectual manner, while those conferred by the legislation of last session have been rendered largely available for the public good. The new practice referred to consists in the substitution of proceedings for penalties against sanitary defaulters instead of the vestry executing works and exacting merely their cost from owners. The 23nd and 39th sections of the Sanitary Act for preventing the spread of infectious diseases, were applied in numerous instances with most satisfactory results. Dr. Sanderson refers to the "standing nuisance" caused by the storage of enormous quantities of half-liquid mud, charged with animal impurity, which is scraped from the streets by the scavengers, and allowed to decompose gradually in a closely-inhabited neighbourhood in the very centre of the parish.

AN UGLY RUMOUR.

A STATEMENT has been made to the effect that the health of the young *employés* serving in the Royal Gardens at Kew is seriously undermined, and that in a short space of time, by the nature of their work. Three engaged in the herbarium have died, it is stated, after being compelled in succession to resign on account of sickness. Rumour would seem to assert the existence of something specially pernicious in the work at Kew, and we should be glad if the authorities would furnish requisite information, that it may be determined whether the dangers to which the young assistants are exposed are of an average kind and degree, and whether the alleged sickness and mortality are due in any way to self-neglect or the violation of necessary precaution. The statement we have referred to is an ugly one.

A SURGEON OF THE GUARDS' ESTIMATE OF THE PRUSSIAN TROOPS.

THE new Army Medical Department Blue-book contains a paper which we have perused with more than ordinary interest. It is a report by Dr. Bostock, surgeon of the Scots Fusilier Guards, on the Medical and Sanitary Services of the Prussian Army during the late campaign in Bohemia. While Dr. Bostock saw much in the Prussian system to call forth his very warm admiration, it must not be supposed that he writes entirely in a strain of indiscriminate eulogy. On the contrary, he expresses himself as anything but gratified with the general sanitary arrangements in the cantonments and field hospitals. We learn that the Prussian soldiers on the march were delighted to get rid of the "monkey on the back," as they called the knapsack, and they fared quite as well as their neighbours who were encumbered with them. Some regiments, however, did carry their knapsacks throughout the campaign, and only laid them down on going into action. The greatest distance covered in a single day was thirty miles, but many divisions marched twenty miles for several days in succession. A few men, complaining of weakness in the chest, fell out, and a very few others, of dissipated habits, were unable to keep their places in the ranks.

Dr. Bostock asks, to what is this excellent marching and power of endurance in an entire army to be attributed? Certainly not to the clothing, which is only a slight improvement on the dress of our own soldiers, and is equally ill adapted for hard exercise, nor to the light weight or convenience of the equipment, which is unnecessarily heavy and cumbersome. Dr. Bostock believes it to be entirely owing to the superior physique, and suitable age and condition, of every man composing the army. The commanding officer of one of the regiments of the Guard Corps told him that his battalion took the field with 1002 men, all between the ages of twenty and twenty-eight; and he was enabled to see about 450 men of this battalion on parade. Dr. Bostock adds, "I never saw a more thoroughly efficient body of men; there was not a weedy young recruit or a decrepid old man among them. They were all strongly-built, healthy men, in the prime of life. Undoubtedly, finer individuals can be found in our own brigade of Guards, and probably the average height of the Prussian regiment is below that of our household troops; but for hard work and prolonged exertion they possess every desirable qualification, and all the other troops were of the same excellent stamp. This high state of efficiency is due to the system of recruiting adopted in Prussia."

THE HULL MEDICAL SCHOOL.

EVENTS have recently transpired which have called the attention of the profession and the public to the present state of the Hull Medical School. It appears that the school was formed thirty-five years ago, and has been kept up with much self-denying labour, through many difficulties and discouragements, to the present time. The district, drained as it is by the schools of Leeds and Sheffield, supplies a very small number of pupils, the average annual increase of late not exceeding three. It is therefore no matter of surprise that the institution languishes; and, in addition to the other material drawbacks, it has this session to contend with a serious difficulty caused by the final resignation, after repeated notices, of the Lecturer on Medicine, whose place it is found impossible to fill from among the resident practitioners of the town.

Such being the case, it is most desirable to ascertain, by authorised inspection, how far the institution is fitted to afford to its students those facilities for instruction which the present advanced state of medical science demands. This course, if adopted, would be most satisfactory to the public as well as to the profession.

CHELTENHAM WORKHOUSE.

WE have every reason to believe that the Report of Dr. E. Smith, Poor-law Inspector, will substantially confirm the existence of the evils for complaining of which Mr. Fleischmann has been obliged to resign his office. It was stated at the last meeting of the Board of Guardians, that the recommendations made were of such magnitude that they would raise a storm of indignation, and went to the extent of recommending the guardians to build a new workhouse at a cost of £20,000. We trust that the Poor-law Board will do Mr. Fleischmann the justice of communicating their decision publicly to the guardians, and not bury it in their office with so many other documents of a similar kind. With reference to the secret manner in which the inquiry was conducted, it would appear that Dr. Smith's instructions were worded with extreme precision, and that his orders were to visit the Cheltenham Workhouse, with special reference to Mr. Fleischmann's complaints, in conjunction with the guardians and Mr. Fleischman, and to report directly to the Poor-law Board. The responsibility of secrecy rests, therefore, with the guardians and the Poor-law Board. The former had unlimited discretion in the matter, and the answer of the Secretary of the latter to our request, that one of our Commissioners should attend to watch the proceedings on the part of the public, was, even if true, somewhat Jesuitical. We wish to state this in justice to Dr. Smith. If the Board has no power to admit anyone to the Cheltenham Workhouse, why was the order given for the admission of Mr. Fleischmann, whom the guardians might, and probably would, have excluded had they the option of so doing. We can have no doubt that the guardians would have admitted our Commissioner on the same authority, if publicity had been welcome to the Secretary of the Poor-law Board. That authority was denied, and we shall leave the public to draw the obvious inference from their official modesty.

THE ABYSSINIAN EXPEDITION.

It is not a little curious to watch the course of public opinion, and observe its pendulum-like movement from one extreme to the other. At first, Abyssinia was described as one of the most insalubrious countries in the world,—so pestiferous that it was a source of astonishment how it could possess any inhabitants of its own at all. Now it is otherwise. Mr. Dufton, in his recent work, "A Journey through Abyssinia," has not seen the almost insuperable difficulties of which others have spoken. Sir H. Rawlinson, M.P., expressed himself in still stronger terms. He assured his hearers, at Frome, that all the stories they had seen about the unhealthiness and difficulties of Abyssinia were mere "moonshine," for the country is really one of the healthiest in the world; so healthy, in fact, as to leave him in no doubt that hereafter all the Indian invalids will use it as a sanatorium. In a military point of view there is no possibility, according to Sir Henry, of anything going wrong; but there is a great possibility of considerable difficulties arising, and we might be obliged, contrary to our wishes, "to occupy the country for a certain time, and perhaps to place another chief on the throne."

But our object in calling attention to the subject is this, and it appears to us an important one: Abyssinia is described as rich in natural products, vegetable and mineral; and we certainly think that such an opportunity as the present should not be neglected for ascertaining all its resources in these respects. If, as we believe will be the case, the Expedition is to be accompanied by a good botanist, naturalist, and geologist, we venture to prophesy that many people will discover reasons for wishing to possess a slice of this much-abused country of Abyssinia.

PERILS OF PRACTICE.

An outrageous, and at the same time silly, charge has been recently made against a highly respected medical practitioner of Wigton, Dr. McNaughton. A single young woman at the seventh month of pregnancy was attended by Dr. McNaughton, and her weak and puny child died about sixteen hours after labour. The worthy doctor was arraigned before the coroner's court on a charge of having caused the death of the child,—the young woman imagining that, by turning, the doctor had inflicted injury on her offspring. There was not a particle of evidence to support such a charge; it was proved, even, that turning had not been attempted. Dr. Eliot and Mr. Brown (of Carlisle) testified to the proper treatment of the case, and the total groundlessness of the girl's supposition, and this the profession will not fail to note. We can pity the wretched girl for her delusion, which, in the agony of her confinement, was perfectly natural, but indignantly condemn the conduct of those about her who encouraged an idea which led to the attempt to sully the unblemished character of an honourable member of our profession without the faintest shadow of reason. The coroner placed the facts in their true light before the jury, who at once returned the verdict, "that the child had died a natural death, and that there was no imputation whatever on Dr. McNaughton." The *Carlisle Examiner*, in strongly condemning those who promoted the inquiry, remarks: "If medical men are to be arraigned on the strength of what patients whose minds are unhinged by suffering may say about them, who would be safe?

A NEW HILL STATION IN THE HIMALAYAS.

An excellent new site for military cantonments on the Pokree range in the Himalayas has been proposed by Dr. Fraser, of the Rifle Brigade. The range is situate between the two stations of Mussoorie and Simla, and is about nine miles long, stretching from the Sirgul Hill to the Deobun Mountain. The elevation is from 6000 to 7360 feet. The site is reached from the plain easily by footpath, and the road to Simla passes beside it. The healthiness of the range is said to be undoubted. At certain season mild fevers occur, but these are due in great measure, it is said, to neglect by the inhabitants of sanitary measures. The population of some five villages near the range average about 600 souls. Supplies could be got without much trouble from the plains. Two spots in the range, called respectively Kailana and Chuckrata, seem best adapted for residence. Kailana is proposed as the site of a convalescent depôt, with accommodation for 500 men, and is about 6600 to 7100 feet in elevation. Chuckrata is separated from Kailana by a narrow gorge, over which the Simla and Mussoorie road passes. One apparent drawback is the natural deficiency of the water-supply in the Pokree range, but this can be remedied pretty readily by artificial means. Dr. Fraser states that in the hot season the weather is cold and bracing generally at the places named, and he thinks the Pokree range would prove, in a sanitary point of view, one of the best hill stations in India; and in this opinion he is confirmed by Dr. Beatson, who declares that he has not seen in the Himalayas a more picturesque ridge than that of Chuckrata. We are not aware at what decision the Government of India has arrived in the matter, but it is to be hoped they will at once see to it, that they secure to our troops any special advantages that the suggested site may be capable of affording.

THE LATE ACCIDENT AT WOOLWICH.

The boys surviving the injuries received at the late explosion at Woolwich Arsenal are doing as well as might be expected; but burns are necessarily tedious and irregular in their progress, from secondary visceral complications. In our first announcement of this accident we expressed a hope that the authorities would not wait for any recurrence of the kind, but set to work at once to provide the necessary accommodation for meeting such contingencies. It would have been inexcusable if, on the future occurrence of an accident, patients had to be placed, as was the case in this instance, two in a bed; and even then only a portion of those injured were enabled to receive hospital accommodation at the arsenal. We are now glad to announce that a new infirmary is to be erected forthwith within the walls of the arsenal, and that the Secretary of State for War has given his final orders in the matter. In the meantime some officers' quarters will be temporarily set apart for the purpose.

APPLICATION OF ANTISEPTICS TO WOUNDS.

The application of antiseptics locally to foul and unclean wounds seems to have found much favour in some parts of the Continent, especially with the Prussians in their military hospitals. An apparatus is there in use by which the spray of a solution of chlorine or other disinfectant is produced. It is made on the principle and plan of the ether-spray producer, but is larger. The bellows, of india-rubber, is strong, and worked by the foot; the tube connected therewith is five or six feet long, it has the usual reservoir of air, and terminates in a metal point. The vessel for the fluid to be vaporised is capable of containing a quart of fluid. It is fitted with two tubes: the one to admit air, the other to pass into the fluid below, and above to be placed on a level with the free end of the tube from the bellows, and to receive the blast from the latter. The success which has attended the local application of disinfectants in the form of spray is said to have been most marked.

HEALTH OF LONDON AND THE LARGE TOWNS.

The deaths registered in London have been steadily increasing during the last three weeks, the numbers being 1182, 1283, and 1332. The temperature was greatly below the average in the first and second weeks of October, and the effect of this

reduction of warmth is apparent in an increase of deaths mainly from diseases of the lungs and heart. Bronchitis was fatal last week to 118 persons, as compared with 90 in the preceding week; the deaths from pneumonia increased from 55 to 76, and from heart disease to 72 from 51. Measles also shows increased fatality, the deaths having been 12, 18, and 23, in the last three weeks. Zymotic diseases have decreased, and the mortality from diarrhœa is rapidly declining.

The annual rate of mortality last week was 23 per 1000 in London, 21 in Edinburgh, and 19 in Dublin; 26 in Bristol, 24 in Birmingham, 31 in Liverpool, 31 in Manchester, 30 in Salford, 27 in Sheffield, 28 in Leeds, 27 in Hull, 29 in Newcastle-upon-Tyne, and 28 in Glasgow. Comparing these rates with those of the previous week, an increase is apparent in London, Bristol, Sheffield, and Leeds; while in Birmingham, Manchester, Salford, Hull, and Newcastle, the mortality has declined.

THE RECOGNITION OF COLONIAL DEGREES.

THE *Age* newspaper of Melbourne contains two articles on the subject of the recognition of colonial degrees by the Medical Council, and objects in warm terms to the motion of Dr. Paget, which was carried at the last meeting of the Council by a majority of 17 to 4. Dr. Paget's resolution was as follows:—

"It shall be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such part of any regulations made by authority of the said Acts, as to them shall seem fit, in favour of persons who shall make application to be registered under the said Acts on foreign or colonial diplomas or degrees: provided such persons shall have resided in the United Kingdom for a period of not less than twelve months immediately previous to making application to be registered; provided the holders of those diplomas or degrees have the right to practise medicine and surgery in the countries where they have been granted; and provided the Council shall receive satisfactory evidence that those degrees or diplomas, or licences to practise, have been granted after a course of study and examinations, such as to secure the possession by persons obtaining them of the requisite knowledge and skill for the practice of their profession."

The *Age* objects that this makes the recognition of colonial degrees, even that of the University of Melbourne, a thing of favour. "It will be recognisable by sufferance only, and by grace of the Medical Council towards the individual possessor. This is surely insufferable exclusion." Considering the high praise by Dr. Burrows of the Melbourne University, of its courses of study and its general arrangements, and the great merit implied in such provisions, we think it would be only reasonable to register its degree unconditionally, and all degrees of colonial universities *which can be so approved*. We should have a more generous and trustful treatment for our colonies than for foreign countries. This feeling was universal in the Council. It would be quite practicable from time to time to have visitations and reports of medical education and examinations of the principal schools of our colonies. Conceding so much to our Melbourne contemporary, he will allow us to remind him of the extreme difficulty of the subject to the Medical Council. It would be absurd, while taking pains to improve medical education at home, to open our Register unconditionally to every school in our colonies. The colonies have, or may have, all their schools under observation. We can at most have only the principal ones; but these we should treat most generously.

THE MAURITIUS FEVER INQUIRY.

WE very much regret to hear that the Board of Health of the Mauritius, instead of setting resolutely to work to determine what is absolutely required to place the island in a satisfactory state, and to cleanse it from the present impurities, which render it a hot-bed for pestilence, have set to squabbling, and to debate upon personalities; whilst the daily increasing temperature, the shift in the wind, and other circumstances are warning the inhabitants of the approach of summer, and predisposing to the occurrence of a second outbreak of fever. It is stated that the proceedings of the Health Board are secret; that the power of Dr. Edwards, the sanitary inspector, has been crippled; that the string of sixty-two questions presented to the civil practitioners for replies is simply ridiculed, and further inquiry likely to collapse. We should be glad to hear that Government has determined to institute a searching examination by a special commission, as suggested and asked for by the local press, into the actual sanitary state of the Mauritius. It might very profitably look to the condition of other stations in the West Indies.

THE LATE MEDICAL OFFICERS OF ST. PANCRAS WORKHOUSE.

WE regret to say that the Poor-law Board have intimated to Mr. Bennet that they do not feel themselves in a position to interfere with the recent unjust decision of the Board of Guardians of St. Pancras. It appears that, notwithstanding the boasted powers of general control conferred on them by the Metropolitan Poor Act, the Poor-law Board possess so little real influence over the various guardian boards that they cannot (or dare not) prevent a gross and flagrant injustice like that which has been inflicted on Mr. Bennet and his colleague. It needed but this little incident to convince us fully of that which we previously suspected—that the legislative action of last session has been carried out in so feeble and half-hearted a manner, that the whole affair is rapidly becoming a mere farce.

A GOOD EXAMPLE.

THE poor patients of Guy's Hospital are supplied from time to time, we understand, with batches of newspapers which are dropped by passers-by into a box placed near the London-bridge terminus, and to which is affixed an intimation to the effect that all papers placed within it will be sent to the hospital. This is something more than a good idea, and we commend it to the notice of other charities. The termini at Victoria and Charing-cross and other places would easily, and we have no doubt readily, be made the channels by which some enjoyment might be conveyed to the maimed and the sick in the hospitals hard by them.

LONDON WATER-SUPPLY.

IT is reported that those interested in the existing water companies have received an intimation that the Royal Commission on Water-supply will report in favour of the Thames as a source for the future supply of London. If it be a fact that a majority of the first engineers of the day have recommended more distant sources because of their greater purity and softness, the public will look for very good and sufficient reasons why such an opinion is disregarded. That all the powerful influence of the companies would be brought to bear on the Commission, may be taken for granted; but in a matter of such importance to the health of the metropolis, private interests cannot be allowed to stand in the way.

"ONLY A PAUPER."

UNDER this title our contemporary, the *Morning Advertiser*, records the following piece of inhumanity. A poor boy, who fell ill, was taken out of his warm bed at home for removal to the workhouse at Homerton. The relieving officer was positively cruel enough to send him in an open cart, with nothing on but a night-shirt and a rug. The consequence, as might naturally be expected, was that his disease (a cardiac affection, with dropsy), was much aggravated. He arrived at the workhouse in a state of collapse, and the medical officer of that establishment stated to the guardians that he could not understand how he survived the journey. The relieving officer was cautioned!

THE WOUNDED POLICEMAN.

THE poor fellow who was shot in the mews at Burton-crescent is suffering only in a slight degree from the immediate effects of the pistol shot and the blows he received. He has but a small incised wound of the right temple, and a superficial gunshot wound of the left leg, exactly at the back of the knee-joint. He has peculiar brain symptoms, similar to those observed in delirium tremens, which, however, are the result of the mental shock he sustained. Dr. Paul informs us that he looks very wild, and fancies the man who shot him is to be seen in the ceiling, and at other times under a bed. His answers are short—quite contrary to his usual manner. He cannot be got to take much nourishment, neither can he sleep. With all the cerebral disturbance, his pulse continues good and normal. Dr. Paul fears he may become lunatic.

THE Earl of Derby laid the foundation stone of the New Southern Hospital at Liverpool on Wednesday last. The estimated cost of the hospital is £35,000, including land, and there will be accommodation for 200 beds.

ON the 1st of September, we are informed, scarlatina appeared amongst the boys at Christ's Hospital. With one exception, the cases have been of an exceedingly mild character, so much so that the authorities have not deemed it expedient to interrupt the ordinary proceedings of the school.

THE quarterly meeting of the Association of the Metropolitan Poor-law Medical Officers will be held on Thursday, the 31st inst., at eight P.M., at the Ship Hotel, Charing-cross, when an important discussion is expected to take place on the present working of the Metropolitan Poor-law Act of 1867.

THE St. Andrews Medical Graduates' Association will hold its anniversary session at Willis's Rooms on Dec. 2nd and 3rd. A large number of members have promised papers. The Council hope to have a strong muster of members and friends at the dinner, which will take place on Tuesday evening. The Association continues to increase in numbers.

THE Duke of Richmond, as President of the Board of Trade, has conferred on Mr. Harry Leach the appointment of inspector of lime-juice, antiscorbutics, &c., under the new Merchant Shipping Act, which comes into operation on the 1st of January next. Dr. Dickson, R.N. (medical officer to her Majesty's Customs), Mr. Greig (marine secretary to the Board of Trade), and Mr. Leach, are now actively engaged in making all necessary preparations for the fulfilment of its provisions and requirements.

THE fever which has recently threatened the Cape has assumed the form of an epidemic. The accounts which have reached us do not describe with accuracy the nature of the disease. It is generally believed to be a low form of malarial fever, induced by the insanitary condition of the localities infected by it. It was thought by some to have been introduced from the Mauritius. The authorities have suddenly awakened to the importance of adopting stringent measures of sanitary reform.

SOME interesting experiments have been made by M. Lemaire on the air of barracks and forts, and that external to buildings of this kind. By means of refrigeration he has condensed the air from these places, and examined it microscopically. He concludes that the air which is rendered impure by overcrowding and defective ventilation contains not only an excess of carbonic acid, but also organic matter, which gives birth in a few hours to a number of microscopic animalculæ. In about two hours the air taken from a barrack chamber full of men at five A.M. showed several transparent little bodies of different forms, ovoid and cylindrical microphytes and microzoa, in course of development; and after six hours thousands were seen in a single drop, and bacteria and vibriones in abundance. In the case of a fort where the ventilation was better, the results were the same, but in less degree. In the external air, not until the end of forty-eight hours was any microscopic life seen. It is supposed that the animalculæ grow at the expense of the organic matter, and are not generated spontaneously.

THE last cigar smoked by M. Fould has been blamed as the cause of his death. M. Fould had suffered from symptoms of disease of the heart for years past, and succumbed to a fatal attack of angina pectoris. Eminent French physicians, M. Beau and others, believe, more strongly than we do, that the latter is caused by immoderate smoking; and M. Fould's death is taken as the text for a sermon, by the *Salut Public*, on the specially pernicious effects of tobacco. Pathological researches will, however, scarcely countenance the opinion that M. Fould was killed by his last cigar.

IN our number of the 5th inst. we announced the fact of the occurrence of cholera on board the steam troop-ship *Himalaya*, whilst conveying the 1st battalion 60th Rifles from Malta to Gibraltar. We have since ascertained that during the subsequent passage to Quebec two deaths from cholera occurred—one being a soldier, and the other a member of the crew; and that choleraic diarrhœa was also rather prevalent—chiefly, however, among that portion of the crew employed in the engine-room,—and in two instances proved fatal. The *Himalaya*, we believe, was placed in quarantine both at Gibraltar and Quebec, and it is satisfactory to learn that at neither place has cholera since made its appearance. We are glad to perceive that, in spite of some irregularity, which is not uncommon during the decline of epidemic disease, the condition of the Malta population is rapidly improving. The health of the troops also, on the whole, continues satisfactory.

THERE have been some occurrences of late connected with the geographical distribution of disease which seem to us worthy of attention. We have had an epidemic of yellow fever among the military at such an altitude as that of Newcastle, while the districts below, where the disease usually originates and prevails, have been comparatively free. Again, we have heard of late years of the appearance in India of cases of typhus fever—a disease which was for a long time supposed never to be seen in tropical climates. Cholera has also prevailed at positions of considerable altitude. Thus, Murree, Simla, and Subathoo are over 6000 feet, and the disease has been very fatal at these stations.

THE COMMUNICABILITY OF CHOLERA.

II.

DR. BURDON-SANDERSON commenced his experiments on the 11th of August, 1866. He used either the alvine discharges of cholera patients or the contents of the intestines removed after death. The liquids thus obtained were always treated in the following manner:—

"The liquid was placed in a soup-plate, and introduced into a glass chamber communicating with a chimney in the laboratory, by which arrangement the possible diffusion of the poison of cholera in the air was prevented. It was then left to itself, excepting that in case it appeared that the liquid was much diminished by evaporation, distilled water was added so as to restore it to its original volume. In accordance with the method employed by Professor Thiersch, paper impregnated with cholera liquid was prepared daily as follows:—A sheet of the best Swedish filter-paper was divided by pencil lines into square inches. Of this paper so divided rectangular pieces

were cut, measuring five inches by five inches and a half, so that each contained twenty-five squares, leaving a margin of half an inch along one side. Each piece so prepared was steeped by drawing it through the liquid, and, in order to do this conveniently, its free margin was seized by a glass clip, having blades five inches wide, similar to that employed by photographers; and great care was taken that the twenty-five squares not included in the clip should be evenly and thoroughly steeped. This having been accomplished, the superfluous liquid was allowed to drain off, and the paper was laid on a frame of glass, by which it was supported horizontally in the interior of a metal box, measuring six inches transversely in either direction, open at the bottom, and communicating at the top with a flue. In this flue a rapid draught was maintained by a large gas flame kept constantly burning, by which means air was made to pass rapidly over the surface of the paper, while at the same time the destruction of all volatile organic exhalations was insured. The time required for the complete desiccation of the paper varied according to the nature of the liquid as well as the state of the atmosphere. Thus it was found that paper steeped in distilled water regained its original weight on a dry day in forty minutes. Paper steeped in rice-water liquid, obtained from patients in cholera, was usually an hour in drying; whereas paper prepared with the more tenacious liquid usually met with in the stage of reaction could not be dried in less than three hours. Again, it was found that on damp days the operation lasted three or four times as long as on dry days, and occasionally it happened that the paper could not be dried at all. The weight taken up by each square inch of paper was then determined by the balance. The prepared square, which had been weighed in a watch-glass before it was steeped, was again weighed after desiccation in the same manner. The difference, of course, expressed the weight of solid matter taken up by twenty-five square inches. On damp days it is to be assumed that the numerical result given is in excess of the real weight of cholera material contained in the paper. As, however, it was not at the time thought expedient to use any other method of drying, the error could not be avoided."

Dr. Sanderson gives brief notes of the cases of cholera from which intestinal liquids were obtained, and details of the weight of cholera material contained in each square inch of paper prepared as above described. To the animals experimented upon were given definite quantities of the prepared paper, but we shall restrict ourselves solely to the results obtained by its administration to mice, these only being positive. The experiments upon mice were performed in the months of September, October, and November. The results obtained during the two former months are thus tabulated by Dr. Sanderson:—

Number of Mice employed in Experiments on Cholera Liquids from Sept. 7th to Oct. 15th, the Number of Doses of Cholera Paper given, the Number of Animals apparently ill in consequence, and the Number and Per-centage of Deaths.

Nature of Liquid.	Number of Animals employed in Experiments.		Number of Doses given to each couple of Mice.		Number of Animals affected.		Number of Deaths.	
	Alvine Evacuations.	Intestinal Contents.	Alvine Evacuations.	Intestinal Contents.	Alvine Evacuations.	Intestinal Contents.	Alvine Evacuations.	Intestinal Contents.
Liquid kept								
Less than 24h. (1st day)	10	26	27	41	2	2	2	1
,, 48h. (2d day)	–	22	–	42	–	8	–	7
,, 72h. (3d day)	4	10	14	21	4	10	0	3
,, 96h. (4th day)	10	4	20	10	8	2	6	2
,, 120h. (5th day)	20	22	40	44	7	10	5	5
,, 144h. (6th day)	10	–	20	–	0	–	0	–
,, 168h. (7th day)	10	–	20	–	0	–	0	–
	64	84	141	158	21	32	13	18

On this table Dr. Sanderson remarks that the numbers given

"Do not at first sight suggest any very obvious relation between the *stage* of spontaneous decomposition represented by the paper employed and the results of the experiments. If, however, as in the following table, we substitute the *relative* numbers for the absolute ones, the significance of the facts becomes much more apparent:—

Per-centage of Attacks and Deaths relating to each Day of Spontaneous Decomposition.

Period of Decomposition.	Per 100 Animals employed in Experiments.	
	Number affected.	Number that died.
First day	11	8
Second day	36	32
Third day	100	21
Fourth day	71	57
Fifth day	40	24
Sixth day	0	0

Dr. Sanderson adds:—

"As regards the mortality, the numbers do not seem to be conformable to any law. They merely show that the relative number of deaths was greatest among animals to which paper of the fourth day had been given. But the criterion of the efficiency of any assumed cause of disease is evidently to be sought for, not in the *mortality* of the persons or animals subjected to its influence, but in their *liability* to attack. According to this acknowledged principle in etiology, we have to look for indications of the comparative infectiveness of the liquid at different periods, not in the number of deaths, but in the numbers affected. The significance of the latter, as given in the second column of the table, scarcely needs to be pointed out. They clearly show that the liability to attack was greatest as regards the third and fourth days, much less and nearly equal as regards the second and fifth days, and least as regards the first day. In some instances, however, the intestinal liquid appeared to have attained its full virulence even as early as the second day, as may be inferred not only from the large proportion of deaths among animals to which second-day paper was given, but still more strikingly from the high mortality (48 per cent.) observed in Experiments XIV. to XVII., in all of which the material used was given less than forty-eight hours after the death of the animal from which it was taken."

In the series of experiments above summarised, the fact is conclusively shown of the communication of a lethal malady to mice by the addition of exceedingly minute portions of the solid material of the intestinal fluid or the intestinal discharges of cholera patients to their food. No difference as regards infectiveness was detected between the alvine evacuations and the liquid removed from the intestines after death.

Further, an intercurrent series of experiments, conducted by Dr. Sanderson, showed that the intestinal fluids of mice infected by cholera discharges communicated a malady indistinguishable in character from that with which they were affected to other animals of the same kind.

A remarkable and most suggestive fact in Dr. Sanderson's observations was this,—that experiments made on mice during the month of November yielded negative results. This, Dr. Sanderson observes, "can scarcely be attributed to any other circumstance than the comparatively low temperature which then prevailed; for in every other respect the conditions of experiment were identical. It is specially worthy of note that not only none of the animals died, but that none of them showed the slightest signs of indisposition." The mean daily temperature during this series of experiments (3rd to 13th of November) was 49·0°; during the previous series (9th of September to 10th of October), 55·9°.

The characteristics of the disease induced by the poison in the mice were as follows:—(1) Loss of motility and excitability. (2) A remarkable diminution of temperature, even to the extent of twenty degrees below the natural standard. "So extraordinary a loss of temperature seemed at first," writes Dr. Sanderson, "so incredible that I was induced to believe that some error of observation had been committed; but repeated measurements confirmed the accuracy of the results.

In general a low temperature was a certain precursor of death; but in two remarkable instances recovery took place after the animals had remained motionless, and apparently lifeless, with a temperature below eighty degrees, for more than a day." (3) Alterations in the alvine discharges; the fæces, which in the normal state are firm and beaded, becoming softened, varying in consistency "from that of the excrement of the ox to complete fluidity, and in colour from olive-brown to intense dull-red—a fact which probably led Professor Thiersch to believe that they were stained with blood." The principal after-death appearance is thus described by Dr. Bristowe, confirmatory of Dr. Sanderson's more detailed description:—"The fluid in the intestines always contained detached intestinal epithelium, and sometimes an immense quantity of it. The cells were mostly separated from one another, but were sometimes in groups, as if they had come off in flakes either from the surface of the mucous membrane or from the interior of follicles. Such cells were met with even in the mucus extruding from the anus. There were also throughout the whole of the intestinal tract vast numbers of low vegetable organisms, some consisting of two joints and undergoing constant movement, others of several successive joints, and either moving or stationary (*Bacteria*, &c.)" Dr. Sanderson describes and depicts "rod-like bodies, resembling in form and structure the fronds of Oscillatoria, but devoid of colour, covering the field of the microscope. Along with these organisms, which possessed an active molecular motion, were occasionally found filaments and sporules of fungi."

Dr. Sanderson reports a series of experiments on mice, by Dr. Thudichum, the results of which confirm those obtained by himself. The value of the positive results obtained by Dr. Sanderson in explanation of the fact of human infection is, in Mr. Simon's opinion, indisputable; and he adds some suggestive observations to Dr. Sanderson's report as to the uniformity, or absence of uniformity, of infectant power in the choleraic contagium under varying conditions of *time* and *place*. Referring to the influence of soil in relation to peculiarities of place, Mr. Simon makes the following important remark:—

"I must repeat my deep sense of the value of Professor von Pettenkofer's researches, adverted to in my last report, both as contributing new knowledge, and as suggesting right directions for inquiry. It appears certain that, henceforth, no local health-officer will be properly up to the standard of his scientific duties, unless he thoroughly knows the distribution and stratification of soils in the district for which he acts, nor unless he also maintains such systematic and exact observation of the height of wells as will enable him always to speak with precision as to the movements of water-level in the soil: for it seems established that these are two great governing influences in relation to the spread of disease."

THE STATISTICAL REPORT OF THE HEALTH OF THE NAVY FOR THE YEAR 1864.

No. I.

THIS Report was issued from the Queen's Printing-office on Wednesday last, and is comprised in a voluminous Blue-book of more than 300 pages. It contains a large mass of most valuable statistical and professional information, which assists in no ordinary degree to elucidate important facts with reference to the physical and hygienic state of the Royal Navy of Great Britain; and displays, too, to a large extent, the amount of work, the kind of energy, and the peculiar habits of observation demanded from all medical officers in that important service. It shows, also, how efficiently their medical duties are performed, and emphasises the necessity of advocating (as has been constantly done in the pages of THE LANCET) the claims of these public servants to the liberal consideration of her Majesty's Government. For, as this service equals, and perhaps exceeds, that of the army in its cosmopolitan experiences, so are all particulars and statistics gleaned from those experiences specially valuable, as tending to utilise the science of Medicine for the prevention as well as the cure of disease.

There are now nine accredited stations at which British ships are placed; and the Report very properly embraces separately, and afterwards collectively, all medical minutiæ peculiar to each quarter of the globe in which these stations are situated.

The most notable events in the medical history of the British Navy, in 1864, were the occurrence of a very severe outbreak of yellow fever at Bermuda, and an equally serious and fatal epidemic of dysentery among the marines stationed in Japan. The destruction of her Majesty's ship *Bombay* by fire on the south-east coast of America also took place in the same year; and this sad event, though of inferior medical importance, must not be forgotten here, because on account of the mortality that then ensued the death-rate of the total force was increased by 1·7 per 1000 men. With a view to the complete utilisation of this important Report, it is proposed to consider *seriatim* those diseases that particularly tend to weaken the force afloat, and so to impair the effectiveness of our ships at sea; and it will be our endeavour to point out, as concisely as possible, what has been, and should be, done by legislative enactments, as well as by medical aid. And, commencing on this principle, we may rightly give to a review of venereal diseases the first and foremost place, for it is the bane of Britishers abroad as well as at home, and minifies the total power of our fighting men more than any other form of disease. During the year under consideration, it appears that there was a decrease of syphilitic disease in the Home, Pacific, and Australian stations, and also in the irregular force, and that the greatest increase took place on the China station. In epitomising these facts, it may be observed that the Contagious Diseases Act was in operation in the home ports during part of the year, but the trifling reduction in the ratio of venereal disease cannot fairly be attributed to its action. A record of venereal diseases on this station shows that the *Asia*, the *Cumbridge*, the *Duke of Wellington*, and the *Excellent* numbered collectively 438 cases of syphilis and gonorrhœa; and that the flag-ship *Edgar* alone numbered on her sick list 180 cases of syphilis and 4 of gonorrhœa. The valuable remarks of Surgeon Sloggett, of the last-named ship, are included in the Report; and this gentleman, having referred in emphatic terms to the importance of a stringent application of the Contagious Diseases Act, thus records his experience when surgeon of H.M.S. *Calypso* in 1858:—

"We lay at anchor in Honolulu harbour for three months: the men had almost unlimited night leave on shore, and, as it was the winter season, when the port is frequented by a large number of American whalers, the town abounded with native prostitutes, who at that time made it their practice to migrate to that port from all the other islands of the Sandwich group, and to remain until the departure of the whale ships to their cruising grounds in the spring. No legislative enactments were then in force for the prevention of syphilis, and, out of 153 men and officers, 33 were put on the sick-list for venereal disease. The effects of this disease were visible throughout the islands: the population was rapidly diminishing; sterility was common among the native women; among those with families the children were generally few and stunted, and too many of them with constitutional syphilis visibly impressed on their persons. About eighteen months afterwards, with the same crew in the same ship, I visited Tahiti, where the ship remained three months, during which time the men lived on shore in tents or storehouses. We sailed thence for Valparaiso, having had only four cases of venereal disease. The French had enforced a system of inspection, and enforced care and detention of prostitutes; so that, had it not been for the occasional importation of the disease in whaleships, syphilis would have disappeared from the island. The population was on the increase, and the children of the natives were numerous and healthy."

We give these observations *in extenso*, for, as the author pertinently remarks, "Can there be a more convincing proof of the wisdom and beneficence of legislative enactments for the pre-

vention of disease?" From the returns of the Pacific station, we find that the chief centre of venereal disease is at Valparaiso, as to which place Dr. Irvine, surgeon of the *Tribune*, remarks that the French and Spanish ships of war were literally crippled from syphilis. Prostitution exists here among the half-caste portion of the inhabitants to a very great degree. No surveillance or registration of any kind exists; and as there is no hospital accommodation, the women ply their trade and spread the poison until compelled to succumb to the disease. But it is observed that Callao contrasts most favourably with Valparaiso, and that very little syphilis exists in the former town, though no municipal control is adopted. The medical officer of the *Nuiad* storeship, permanently stationed there, is unable to account for the absence of the disease, but very properly remarks that "it would be a great advantage to ships newly arriving on the stations, if they proceeded to Callao at once, instead of first calling at Valparaiso." In turning to particulars of the Mediterranean stations, we find that the increase of disease was entirely due to the Greek possessions of Corfu, Zante, and the Piræus of Athens; and that, according to the surgeon of the *Liffey*, no one case of disease can be traced to Malta. The Piræus is, above all other places, redolent of these diseases; and of the cases that occurred in the *Gibraltar* and *Royal Oak*, all were either contracted in England before the departure of these ships, or subsequently, at the Piræus, Corfu, or Naples, "where surveillance of prostitutes is either imperfectly or not at all carried out." Nearly all cases that occurred in ships on the North American and West Indian stations were contracted at Port Royal or Kingston, in the former of which places the promiscuous relation of sexes is glaringly notorious. A bad form of syphilis is now rapidly augmenting, and it must be remembered that this population is entirely dependent on the naval and military elements. A very brief account is given as to these diseases on the Cape of Good Hope and East India stations; but the medical officers generally testify to the increased prevalence of syphilis in the Cape colony, and to the large amount of disease that prevails on the east coast of Africa, especially at Zanzibar, and at the Seychelle Islands, as well as at the ports of Madagascar visited by our cruisers. The summary of disease in the China station forms an important concluding item in this review. During the year 1864, no less than 869 cases of syphilis were under treatment, 47 of which were eventually invalided. Nearly all these cases originated in Japan, and it is a remarkable fact that (as is recorded by the surgeon of the *Conqueror*) "the climate appears in the most intense manner to favour some one or other of the baneful effects of the poison." All records of treatment, and the results thereof, emphasize this remark. Whether mercury or simpler remedies were used, secondary symptoms of some sort almost invariably appeared; and, as a necessary consequence, opinions recorded in this part of the Report as to the properties of mercury in syphilis are very various and very conflicting. In summarising statistics, it may suffice for the present to state that, during the year, a total of 4385 cases of syphilis were under treatment in the Royal Navy, of which 1 died and 101 were invalided. The daily loss of service from this loathsome and destructive malady was equal to 460 men, the complement of a large frigate; and the total days of sickness on board ship and in hospital for all cases, gave an average duration of 38·3 days to each case. It has been thought desirable, in the above remarks, to present our readers with a geographical rather than a statistical review, and we propose, in future notices of this Report, to adhere to the same plan; because it is so very important and so eminently useful to acquire a clear and succinct knowledge of the etiology of disease.

PROFESSOR PETTENKOFER (of Munich) has arrived at Zurich, where he intends to remain during the cholera epidemic, in order to study the nature and cause of the disease.

REPORT OF THE INTERNATIONAL MEDICAL CONGRESS

HELD IN PARIS.

SIXTH DAY, THURSDAY, AUGUST 22ND.

EVENING MEETING.

M. BOUILLAUD IN THE CHAIR.

THE time of the Congress was well and faithfully employed this evening in listening to several communications of interest and importance on subjects mostly in connexion with anatomy and physiology.

The attention of the audience was principally excited when M. BRUNETTI spoke at length in very eloquent terms of his discovery of a new method for the preparation of anatomical and pathological specimens. With consummate art the Italian professor worked up the curiosity of his audience until, seeing it had reached its highest pitch, he concluded by disclosing his process, amid the thundering applause of the whole assembly. To explain this enthusiasm, it must be observed that the learned professor's discovery is really a most important one, destined to effect a complete revolution in this peculiar art. The resultswhich he obtains with his process are very remarkable. His collection of specimens in the Italian section of the Exhibition had struck with admiration medical visitors, and obtained for their author the reward of a gold medal. But M. Brunetti had not yet revealed his process. With great tact and cleverness he waited for the occasion of the International Medical Congress to make the disclosure of his method as solemn and as public as possible, and reap the benefit of his ingenuity and his best reward in the approbation of such a large number of professional brethren. His success has indeed been most complete.

To such as are unacquainted with the anatomical preparations of M. Brunetti, it may be of interest to mention in a few words, that their state of preservation is really wonderful. All the tissues are equally preserved, and even the histological elements are present. The preparations are light, airy, elastic, and easily handled. The connexions of the different parts are maintained. The process is simple, feasible, and inexpensive. It comprises four operations. 1. Washing the part. 2. Divesting it of its fatty matter. 3. Tanning. 4. Desiccating. The first part consists in injecting pure water through the vessels and excretory canals, then a current of alcohol to remove the water. The second part consists in injecting ether likewise through the vessels and excretory canals. The ether pervades the whole tissue, and destroys all the fatty matter. Before proceeding to the next part, M. Brunetti drives out the ether by means of injections of pure water. The tanning consists in dissolving tannin in boiling distilled water. This solution is introduced by means of an injection through the same passages. M. Brunetti then dries the part. He employs a vase with a double bottom, full of boiling water. Through a system of tubes which emerge from an air-reservoir, pass through a base containing chloride of lime, through another vase which is heated, and then through the vessels and excretory canals, M. Brunetti substitutes a current of warm gas, which sweeps through the part and dries it up.

M. DUVAL (Director of the School of Naval Medicine of Brest), read a memoir containing the relation of a series of "Experiments performed upon the Bodies of Executed Subjects during the years 1850, 1851, and 1866." These experiments include the nervous system, the alimentary canal, the circulatory apparatus, the respiratory organs apparatus, and the genito-urinary apparatus.

1. *Nervous System; Reflex Movements of Animal Life.*—On two subjects, in 1866, the reflex movements were most obvious. They were excited either on pinching the skin or on giving a smart stroke with the hand. In one subject, the reflex power continued during almost two hours after the execution.

2. *Alimentary Canal.*—On the stomach being exposed, the peristaltic and anti-peristaltic movements were quite perceptible. Electricity exercised no action upon the gall-bladder and biliary ducts, nor upon the vena porta and the spleen. The small intestine presented an undulatory movement produced by the peristaltic and anti-peristaltic contraction.

3. *Circulatory System.—Carotid Arteries:* Two subjects were examined, both had been beheaded only five or six minutes before. The divided extremities of the common carotid arteries were seen to rise with regular jerks, to stretch out, and to extend beyond the line of section, and then to retrograde. At each impul-

sion a small quantity of strumous, ruddy blood issued from the gaping orifice of the carotids. *The Heart:* On examination, seven minutes after death, the pulsations were quite perceptible through the double-lining of the pericardium. Spontaneous contractions of the right auricle were observed. The ventricles were also seen distinctly to contract; and this movement took place at the same time in both ventricles. *Aorta:* On being divided at about five centimetres above its origin, the index finger was introduced into the gaping orifice, when the particles closed around the finger with such power that in two cases the heart remained suspended to the finger during one moment. This experiment could be repeated with success an hour and a quarter after thedeath of the subject.

4. *Respiratory System: Experiments on the Action of the Intercostal Muscles.*—The author stated the following results: The internal intercostal is an inspiratory muscle, since it raises towards the upper rib, which remains immovable, the lower one, to which it communicates an eccentric movement by a sort of rotation on its extremities. The external intercostal muscle exercises an inspiratory action in the intercostal regions, as well as in the inter-cartilaginous regions. The functions of the external intercostal muscle are identical.

5. *Genito-Urinary Organs.—Ureter:* The contractility of the ureter was shown either by mechanical irritation or by means of electricity, sometimes merely by exposure to air. The presence of urine was not necessary to excite the contraction of the ureter. *Bladder:* The application of electricity led to a considerable discharge of urine through the urethra. *Ductus Deferens:* Electricity produced contractions, the passage becoming tortuous. *Seminal Vesicles:* On application of electricity the contraction was sufficiently powerful to determine three times the ejaculation of a thick viscid fluid, similar to sperm. The smell is insipid, and unlike that which it expels during life. Being placed on a bit of glass and submitted to examination with a microscope, a few lifeless spermatozoids were discovered.

M. DUCHENNE (de Boulogne) read a paper entitled "Further researches on the Functions of the Intercostal Muscles with the aid of Clinical Observation." The author said that the experiments related by M. Duval supported his own experiments performed by means of electricity. Clinical observation during the last ten years had carried out the results of his former experiments. He handed round the photographic likenesses of two patients affected with progressive muscular atrophy, both of whom had a deficient series of inspiratory muscles, and are living demonstrations of the functions of the intercostal muscles. After having described the change brought on by the disease, M. Duchenne said in conclusion, "that the intercostal muscles are not only destined to preside over costal respiration, but that in their tonic power they maintain the normal limits of thoracic capacity, by neutralizing the action of the expiratory powers, which tend to diminish this capacity."

Professor BACCELLI (of Rome) gave a mathematical demonstration of the movements of the heart and vessels. A line drawn from the aorta to the apex of the heart represents the *hydraulic axis* of the flow of blood which is driven from the ventricle into the artery. Around this line M. Baccelli ingeniously traces the parallelogram of propelling forces of which it is the resultant. The two lower sides of the parallelogram represent—one, the axis of the parietes; the other, the axis of the ventricular wall. This configuration, joined to the disposition of the fibres of the cardiac muscles, explains, says M. Baccelli, the way in which the sides contract during the ventricular system, and the shortening of the hydraulic axis, which is a necessary consequence.

The same demonstration may be applied not only to the aorta itself, but to the whole system of arterial circulation.

THE PROVINCIAL MEDICAL SCHOOLS: THE INTRODUCTORY ADDRESSES.

THE unusual demands upon our space have prevented us giving insertion in detail to the various addresses which were delivered at the commencement of the present session at the provincial schools of medicine. We regret this the more, as we feel strongly that the utility and influence of the provincial schools are increasing year by year. The professional staffs are thoroughly in earnest in their endeavours to impart the highest and best amount of knowledge; they aim at enabling those under their tuition to reach in due course the highest standard of excellence in medical science, and to acquit themselves with noticeable credit. To this end the facilities for observing disease have been largely increased and gradually improved in the provinces, so as to render it possible that they may be brought in time to the verge of a competition with some of the London schools. It is for the latter to see that neglect or illiberal policy do not deprive them of the marked lead they have always taken as educational institutions, and that the provincial schools do not nearly rival them by the adoption of improvements which are dictated by the wants of the present day.

We notice with especial commendation, and as significant of the object and aims of the provincial schools, the choice of the subjects made by the lecturers this year, and the high tone infused into the admirable addresses that were given in those schools.

At the Queen's College, Birmingham, Mr. Pemberton selected as his subject, which he handled in a thoroughly philosophical spirit, "Modern Surgery as a Science and as a practical Art." He prefaced the subject-matter of his address by a laudatory comment on the labours of Mr. Sands Cox, and the expression of a hope (which shows how anxious his colleagues are to improve their school) that, ere long, the collegiate establishment might represent the greater part, if not all, the medical institutions connected with Birmingham, so as to ensure the permanent prosperity of a great medical school in the midland district. Mr. Prilgin Teale, jun., at Leeds, referred to the anticipated progress in the school, the prospect of a new hospital, and the development and adaptation in the future of the tutorial system to the wants of the student of the present day, as illustrative of the increasing means of a large provincial school to do good work in medical education. He entered fully into the tendency of modern science, and the augmentation and perfection of aids to observation and diagnosis, showing how strongly these are utilised in his school. At Newcastle, Dr. Humble trod in the same direction, and impressed on the students the high calling and responsibilities of the profession of medicine. Mr. A. B. Steele, at the Liverpool Royal Infirmary, showed how a conclusive proof of the success which had attended the efforts made to raise the character and increase the efficiency of the Liverpool school existed in the fact that the number of students had increased gradually year by year, and in the success attained by them in competitive examinations. He pointed to a roll of provincial men who had given by their attainments and eminence an example which would seem to be producing the best fruits—Hey, Carpenter, Laycock, Dalrymple, Martineau, Crosse, Pritchard, Symonds, Budd, Herapath, Swayne, Shapter, Wiblin, Nunneley, Barker, Carden, Paget, Turner, Rumsey, Robertson, and Radford; and expressed his belief that every effort was being made, by development of the demonstrative and tutorial systems, to raise the school to an effective condition. At the Sydenham College, Mr. Bates impressed on his hearers the necessity of aiming at a high mental culture in the profession, and the importance of a study of the allied sciences. At Manchester, Dr. Thornburn illustrated in detail the power and place of art in the treatment of disease, and enunciated principles which must ere long be our guides in therapeutics,—principles which the profession is hardly yet ready to receive as truth, which have been evolved from the prevailing reign of scepticism, and the appreciation of which by the lecturer showed how alive he and his colleagues are to the aims and tendencies of medicine in the future. The lecturer dwelt particularly upon the fact that though we must always act in accordance with "nature" in curing disease, an unnatural and one-sided view of this natural power had shaken the public confidence in medicine. The physician could control, aid, or obstruct the course of nature. What the industry and skill of the farmer are to the powers of nature, as developed in the crops of the earth, such are the science and art of medicine in relation to the same powers where sickness and its recovery are concerned. Lastly, we may notice that, at the Sheffield School of Medicine, Mr. Baker, F.C.S., dwelt emphatically upon the all-important subject of the study of natural sciences in connexion with medical education.

The addresses to which we now specially refer will bear comparison in every way with those delivered in London; they are, perhaps, peculiarly significant of the efforts that are being made to afford to the student in the provinces every facility that he may require to thoroughly qualify for the several ordeals before, and the highest confidence after, the passage of the prescribed examinations.

Foreign Gleanings.

ITALIAN VIEWS OF BRIGHT'S DISEASE.

DR. SEMMOLA, professor at Naples, maintained six years ago, in a paper sent to the Academy of Medicine of Paris, that the first cause of the presence of albumen in the urine is not a peculiar pathological state of the kidney, but a consequence of imperfect nutrition, by which albumen can no longer perform its functions, and must, as a foreign substance, be eliminated by the kidneys. The author believes that albumen in Bright's disease differs from normal albumen, this being recognised by the opalescence of the blood due to the suspension of albuminous molecules in that fluid. The decrease of urea in the urine of patients labouring under albuminuria is connected with two distinct periods of the complaint. In the first period this decrease corresponds with the appearance of the albumen; in the second period there is urea in the blood. The decrease of urea in the urine is special to Bright's disease, and is not noticed in those cases of albuminuria symptomatic of pregnancy or heart disease. The same holds good as to the decrease of sulphates in the urine. In fact, actual Bright's disease has its exact fac-simile in the artificial albuminuria produced by the suppression of the functions of the skin when the latter is artificially covered with a thick air-proof compound. Bright's disease should therefore be considered, according to the author, as the result of a double series of effects which follow the more or less rapid arrest of the functions of the skin, and not as a primitive anatomical lesion of the kidney.

PHTHISIS PULMONALIS IN THE PARIS HOSPITALS.

It is often maintained that consumption levies a heavier tribute in England than in other countries; but Paris seems, according to accurate accounts, very severely treated. If we take the Report of the Committee appointed by the Medical Society of the Paris Hospitals for May, we find that in that month 244 patients suffering from phthisis left the hospitals, and 292 died. M. Besnier, the able reporter, says that these figures vary but little month after month. (It might be asked in what state were those who *left* the hospital.) In fact, he observes that, whilst the mortality from all causes was only 146, phthisis alone caused 292 deaths. M. Besnier expresses the wish that the authorities may join with physicians to devise means of disposing of the numerous cases which crowd the wards by sending the patients to milder climates.

DIAGNOSIS OF FRACTURE OF THE CLAVICLE.

M. Alph. Guérin showed, at one of the late meetings of the Surgical Society of Paris, the clavicle of a man who had been buried under a fall of earth. The patient was carefully examined, but no fracture of that bone could be detected. He was carried off by severe pneumonia; and, on dissecting the clavicular region, the soft parts and the periosteum were found *uninjured*; but, on applying pressure to the under aspect of the clavicle, two fragments were thrust upwards. No such results were obtained when pressure was made from above.

ANOTHER ATTEMPT IN THE TREATMENT OF CANCER.

M. Chapelle (of Angoulême, France), says that he has considerably relieved his patients by applications of a solution of nitrite of copper. Acetic acid being dethroned, it is but fair that other chemical agents should be tried. By dint of trials, the remedy may perhaps at last be found.

PROPHYLAXIS OF WHOOPING-COUGH.

M. Davreux (of Liège) uses the following mixture: Extract of aconite, 1 grain; laurel-water, 1 fluid drachm; ipecacuanha-syrup, 45 drops; solution of gum arabic, 7 ounces: one teaspoonful every hour for an infant, two for children above three years, and a tablespoonful for adults. The medicine should be given from eight to ten days, although there may be no cough. The remedy succeeds remarkably when the latter is not of long standing. On the subject of whooping-cough, it may be mentioned that M. Poulet has found infusoria in the breath of patients suffering from that complaint. He concludes that whooping-cough should be classed among diseases as infectious as variola, scarlet fever, typhoid fever, &c.

DEATHS FROM ETHEREAL ANÆSTHESIA.

The Medical Society of Lyons have adopted a most useful measure on this subject. Some doubts existing as to the circumstances which attended cases of death after inhalations of ether, a committee was appointed to inquire into the cases, and their report has been inserted in the Lyons medical journal. Due weight has been laid on the peculiarities of patients, on their state of health, on the manner in which the ether was administered, the amount used, and the means employed for resuscitation; so that this report contains facts of the highest importance touching the use of ether as an anæsthetic. One of these facts is, however, clear,—viz., that ether, in spite of the strong opinion expressed by the profession in Lyons, lays patients open to some danger, though perhaps the peril is not so great as when chloroform is used.

Correspondence.

"Audi alteram partem."

DR. ANSTIE'S LECTURES ON THE ACTION OF ALCOHOL IN DISEASE.

To the Editor of THE LANCET.

SIR,—It is to be hoped that Dr. Anstie's lectures will give a fresh impetus to the study of the action of alcohol in disease, and that its present empirical prescription will soon be replaced by scientific data.

In your last issue, Dr. Barnes testifies to the "stimulating and sustaining powers," also to the "antiseptic virtue" of alcohol in fever.

That it *ever* sustains the powers like food I do not believe, for alcohol cannot replace tissue like nitrogenised food.

Its decomposition certainly evolves heat; yet it is a poor fuel, for it lowers the temperature for some time after it is taken. Alcohol seems to effect this reduction of temperature by appropriating the oxygen of the blood, and so lessens the combustion of better fuel, and retards tissue-change. This action, injurious in health, becomes of value in the severe state of fever. The fever-poison, by quickly acting upon the azotised substances, causes the high temperature, rapid emaciation, and nervous exhaustion. Alcohol, by taking up the oxygen, keeps the fermenting poison at bay, and thus lowers the temperature, prevents the rapid destruction of tissue, and consequent shock to the nervous system.

It is not the large amount of tissue destroyed in fever which is dangerous, but the shortness of time in which it is effected. It would appear that—

"'Tis the pace that kills."

It may be inferred from the above that alcohol postpones the crisis, and such seems actually to be the case,—*vide* the case given by Dr. Anstie, and Dr. Gairdner's paper (THE LANCET, vol. i. 1865, p. 58.)

Mild cases of fever get well better without alcohol. I believe the temperature of the patient to be the best guide; the higher the mercury rises, the stronger the indication for alcohol. But as soon as the temperature tends towards the normal standard, the alcohol should be lessened in quantity, or altogether discontinued; for it must be borne in mind that alcohol causes an increase of imperfectly oxidised bodies in the system, and would thereby retard the convalescence. Should future researches decide in favour of alcohol in fever, I believe one exception at least will be found amongst the zymotic diseases.

In cholera, for instance, alcohol used to be looked upon as the sheet-anchor, but now it is generally regarded as an intensifier of the collapse. The capacity of the blood in cholera to undergo oxygenation is probably lessened, and the action of alcohol under such circumstances would be to rob the blood of its small quantity of oxygen, and so reduce the temperature of the already chilly patient, whilst the retarded oxidation of tissue would favour capillary congestion, and ultimately stagnation of the blood. A somewhat unexpected result after the administration of a *stimulant!* Indeed, our knowledge of alcohol as a stimulant is very crude. I fear we have been too prone to regard increased action of the heart and throbbing of

the large arteries as always synonymous with accelerated circulation.

The heart, no doubt, is the principal agent in the circulation in the arteries, but arrived at the capillaries its supremacy is usurped by the *vis a fronte*. How, then, can that which retards the interchanges between the blood in the capillaries and the tissues about them be regarded as the most powerful stimulant to the circulation?

In cholera it appears desirable not to retard, but to favour oxidation; and as the caustic alkalies promote that change, I gave, during the last epidemic of cholera, the solution of ammonia in hot water to three cholera patients who came under my care, whilst at intervals they inhaled oxygen from Dr. Beigel's inhaler, with apparent benefit. The three cases recovered without any alcohol. As a disinfectant, a dilute solution of permanganate of potash was thrown up the bowel two or three times during the day, as hot as the patients could bear it.

Probably in fever, and diseases of peroxidation, the antiseptic virtues of carbolic acid are indicated, and in cholera collapse the disinfecting properties of the permanganates.

I am, Sir, your obedient servant,
MORDEY DOUGLAS, M.R.C.S. Eng.

Sunderland, Oct. 22, 1867.

COUNTRY WORKHOUSE REFORM.

To the Editor of THE LANCET.

SIR,—I am pleased to find that your Workhouse Infirmary Commissioners have so vigorously commenced their inspection of the provincial union infirmaries. I have long known from constant communication with my country brethren, and also from other sources, that you would discover in them abuses and irregularities which would throw into the shade all that your staff has so ably exposed in London.

But I am afraid lest any provincial Poor-law brethren should fancy that your Commission will be calculated, if helped in any way by them, to embroil them with the guardians, and, taking counsel of their fears, may cast in their lot with them. I beg, if I may be permitted as an old and, I trust, earnest Poor-law medical reformer, to urge them to aid and assist you in every way. The agitation which terminated in the Metropolitan Poor-law Act was the immediate result of your Commission's labours; and if in our day and generation the condition of the sick poor on the one hand, and that of their medical atttendants on the other, is to be materially altered for the better in country districts, it will only be as the result of the exposures of the wrong-doings of the existing system which your Commission can, if fearlessly worked and assisted by the medical officers, bring to light.

Isolated as my country brethren are, there is no hope of much success from any agitation initiated by them; by availing themselves, however, of the aid you offer them, a successful result may soon be obtained now that public opinion has pronounced itself so strongly in our favour.

I am, Sir, yours obediently,
JOS. ROGERS,
President of the London and Provincial Poor-law Medical Officers' Association.

Oct. 1867.

MEDICAL EDUCATION AT OXFORD AND CAMBRIDGE.

To the Editor of THE LANCET.

SIR,—Your leading article of last week on this subject will, I am sure, be read with great satisfaction, for all are agreed that the universities ought to exercise a greater influence than they do upon our profession, and most persons are of opinion that religious restrictions ought not to interfere. I think, however, that many who read your article will be led to infer that those restrictions are greater than is really the case. As far as the University is concerned, I speak particularly of Cambridge, only one remnant of such restriction now remains. A person of any religious persuasion, or, indeed, without any—for he is not questioned upon the subject,—may matriculate, keep terms, proceed to and take any degree (the theological degrees, of course, excepted), and enjoy all privileges which the University can afford. The only point is, that he does not become a member of the Senate, or ruling body of the University, unless he is a member of the Church of England. The almost successful efforts to sweep away this restriction in the last session of Parliament you will remember. In the colleges also there are representatives of various creeds, and they may all compete for and hold the scholarships; but the fellowships are, by Act of Parliament, reserved for members of the Church of England. The ill effect of this has been felt in several of the colleges, because it has prevented them from retaining some of their ablest men. Not long ago a nonconformist undergraduate of Trinity College was senior wrangler, but the College lost the benefit of his services as a teacher because he could not be made a Fellow. Had it been in the power of the College they would, I believe, gladly have done so; indeed, a petition to have the restriction removed, and the power given to elect nonconformists Fellows of the colleges, was unanimously signed.

All, therefore, in the way of education, degrees, exhibitions, and scholarships that the university and the colleges can give are open to members of all religious denominations. The membership of the Senate and the fellowships of colleges remain to be thrown open.

I am, Sir, yours obediently,
M.D. Cantab.

Oct. 19th, 1867.

To the Editor of THE LANCET.

SIR,—I was much pleased by the perusal of your excellent article on the older universities, and especially by your remarks on the Cambridge Medical School. There is one point upon which it would be productive of great advantage if you would use your influence with the authorities. There are no lectures on "descriptive and surgical anatomy," such as are required by the College of Surgeons.

I believe the want only requires to be laid before the "Board of Medical Studies" in order that it may be supplied, for I am sure all are anxious that nothing should be wanting to make Cambridge a most noted school of medicine and science.

I am, Sir, yours truly,
AN UNDERGRADUATE.

King's College, Cambridge.

THE INQUEST AT REDCAR.

To the Editor of THE LANCET.

SIR,—An extract from your number of the 5th having appeared in the *Middlesborough Gazette* of this week, relative to the above case, I feel called upon, as a duty I owe to the profession generally, after your comments, to afford my explanation and reason for acting as I have done. Believing the principle advocated by you to be "audi alteram partem," therefore I conclude you will accord that justice to me, as a member of the profession, by the insertion of this letter. I must, in the first place, draw your attention to some inaccurate remarks, of a most important nature, in your quotations upon the case. First, "That another attempt was made by Dr. Bennett to enter the bladder," but again unsuccessfully, &c. Secondly, "That the man Errington died at ten o'clock on Friday morning." Both these statements are incorrect; as, according to the evidence of the deceased, and the woman in attendance upon him, Dr. Bennett did not make a second attempt to pass the catheter; and the man died about eleven o'clock on the evening of Friday.

When I was called upon professionally to see Errington, on the afternoon of the 18th, I found him in a state of collapse, almost pulseless, complaining of extreme pain over the lower portion of the abdomen. Upon examination, I found the bladder enormously distended, marks of ecchymosis over its site, the penis much tumefied. The poor man's history was that he had not passed any urine since the Monday evening that Dr. Bennett had put him to great pain by using force to pass the instrument for over an hour, not succeeding.

Seeing the nature and urgency of the case I returned home for my catheters, and upon my return was able to pass without difficulty No. 4, relieving him of three or four pints of urine of a dark colour, and strong odour. On the afternoon of Thursday, and the morning of Friday, I again succeeded with more or less difficulty, owing to the more general tumefaction of the penis, and on the last occasion leaving the catheter there until he died. My treatment beyond this was ammonia, beef-tea, and brandy; notwithstanding which the shock to the nervous system was so great that he died from its effect.

Errington, unaided, unassisted, and unrelieved, was left on the 17th in this critical state—in fact, to die. Dr. Bennett, knowing that the man refused to go to the Middlesboro' Infirmary, left him in this condition, and sent him a mixture of tincture of muriate of iron, and never visited him again until the afternoon of the 19th, when he was sent for by the wish of my dying patient for the purpose of telling him how he had treated him. When Dr. Bennett arrived at the house on this occasion I accused him of neglect and disgraceful treatment—unworthy of a medical man, and told him that if the man died I would have a coroner's inquest, as I considered his conduct most culpable. Had Dr. Bennett shown any degree of anxiety for the welfare of his patient, either in calling in the aid and opinion of a brother medical friend, or made more endeavours to relieve him from his critical state, I should never have said one word; but his not doing so, in my mind, proves the "conduct and treatment in the case culpable."

Dr. Bennett, not knowing any other medical man had been called in to see Errington, left him in this state from the evening of the 17th to the afternoon of the 19th, as before alluded to.

With these facts before me, I acted as I did, and, when even Dr. Bennett himself admitted to me that "he had not paid that attention to the case that it required," I felt it to be a duty to my deceased patient and the public to refuse my certificate of death, so that an investigation should take place.

If, however, in acting up to the dictates of my conscience, "and a public duty," I have strayed from the path of "professional etiquette," I regret much its narrowness; but, at the same time, I felt, under all the circumstances of the case, justified in the act; and I must say, in conclusion, that I still consider a great injustice to have been done towards me in your remarks, as I never for one moment wished to take to myself the credit of having succeeded in doing three times that which another medical man failed in doing at all; although having done so was a fact that, with patience and perseverance, success would be the result.

In conclusion, I now lay before my medical brethren the facts of this case, and, should they condemn me for my "conduct," I hope they will remember that "nemo mortalium omnibus horis sapit."

Yours very truly,

THOS. LOOKE, M.R.C.S. Lond.

Redcar, Yorkshire, October, 1867.

*** Our comments were founded on sworn evidence given before the Coroner.

THE DRY-EARTH SYSTEM.

To the Editor of THE LANCET.

SIR,—A letter in THE LANCET of the 5th inst. contains some severe remarks on the Report of the Leamington Sewage Conference, and on the Dry-Earth System. Will you kindly allow me, through your columns, to inform the writer of that letter that the sole responsibility of the Report of which he complains rested with the late Mr. Hitchman, and that his decease renders it impossible for any one to say what was his motive for dismissing that "Inventor's" scheme with only *one line and a-half*, and for giving Royston as the "Inventor's" residence instead of Romsey.

I have scarcely looked into the Report; but if my memory serves me I saw in it, that to an invention of Mr. Cheshire for saving the solid faeces with the loss of the urine, and to an invention of Mr. Bannehr, for saving the urine with little care for the solid faeces, Mr. Hitchman has given full space; and I think I observed that he gave the address of both those gentlemen. The motive, therefore, assigned for neglect and mistake in the case of Mr. Taylor can scarcely with justice be imputed to Mr. Hitchman.

In that letter the Dry-Earth System is termed "impractical," and to its "important and damaging rival" a single testimonial is given. The *Times* newspaper of the 5th inst. contains a testimonial from the Government of India, grounded on reports from all the Presidencies, of the general and successful adoption of that system. This great work, the importance of which, in the opinion of the Inspector-General of Gaols in Bengal can scarcely be estimated, is the result simply of a paper read by me before the Society of Arts, and published in the Journal of that Society for May, 1863.

If Mr. Taylor would inquire at the House of Correction at Wakefield, he would find that there are in that prison 100 cells already fitted with the earth-closet: that governor, warders, and prisoners are all perfectly satisfied with the invention; and that the work of fitting at least 700 cells is in progress.

As to the value of the manure saved by means of dry earth I will, out of many statements which might be made on the subject, content myself with the following:—A farmer, who is also a dealer in manure, supplies and removes the earth for a school of eighty boys. There are for that school four self-acting closets and a urinal. One vault serves for the whole. The removal is effected *once in three months*. It takes place in open day in the high street of a town. No one is offended by it. The manure-dealer has tested its value on wheat and on turnips, and he estimates the value of the contents of that vault, at the end of three months, to be, when dry, at least from £2 to £3 per ton. He fully agrees with me, also, that by repeated uses of the same earth you may increase the strength of the manure to any amount.

Allow me to point to a feature in this "impractical system" in which every medical man must feel a deep interest. The earth commode *can exclude entirely foul smells from the excreta in sick rooms*; and also, as I believe, the many deleterious gases arising from them. What other system will do this? The idea of being instrumental in effecting this relief of even one human misery has often cheered me in a work which, during ten years, has been neither pleasant, nor easy, nor inexpensive.

I am, sir, your obedient servant,

Fordington Vicarage, Oct. 8th, 1867. HENRY MOULE.

To the Editor of THE LANCET.

SIR,—Fully recognizing the value and importance of Mr. Moule's earth-closet plan for deodorizing and utilizing the chief excreta from the human body, I think that its main advantages may be extended to all but the very poorest classes by the simple throwing of a few handfuls of dry clay over each motion in the vessel used. To all who can afford it I strongly recommend the use of the inexpensive and most complete closets supplied by the company established for their manufacture; my suggestion is for those to whom a sum of two or three pounds would be an insurmountable difficulty. The requisite details will be obvious at a glance; a tub or receptacle of any kind to hold some dry clay, and a little scoop or shovel are really all that is required. After emptying, once a day, the vessel or night-stool used, a scoopful of earth should be put in prior to its being used again; no slops of any kind should be thrown into it.

This would bring all the essential features of the admirable system within the reach of nearly everyone who can rent a room in the country and outskirts of towns: that it would present difficulties to those poor living in centres of population is no reason why the millions who can should not take advantage of it.

I am, sir, your obedient servant,

THOMAS PALMER, M.D. Lond.

Upper Southwick-street, Hyde Park, October 4th, 1867.

COUNTRY WORKHOUSE INFIRMARIES.

IN relation to the investigation of country workhouses now proceeding in our columns, the following letter is from one of the Farnham guardians:—

FARNHAM WORKHOUSE.

To the Editor of the Times.

SIR,—The description of Farnham Workhouse, published in THE LANCET of Saturday, and to which you draw the attention of the public to-day, is unquestionably true.

Scandalous as the facts referred to appear, others of a more shocking nature might have been introduced into the picture to render it still more revolting.

The visitors' book may record no indignant protest, but not only protests, but efforts have been made by some of the guardians to remedy the scandal; their influence, however, has never been equal to that of the Poor Law inspector, much less of the Poor Law Board. "The wards are clean, and everything very satisfactory, and the management of the guardians admirable." Yes, sir, the guardians have been well instructed in and well carry out the present Poor Law system, which amounts to this—that they guard the doors of their workhouses with the most determined vigilance against the poor, the sick, and the infirm. If such unfortunates will enter they must be branded with disgrace, made very miserable, must be made to eat the bread of affliction and drink the water of affliction until they disappear.

It is no part of a guardian's duty to see that the poor who are willing to work but cannot get work, shall be fed, that the indigent sick shall be well cared for, and that the aged, when past work, shall be honourably provided for.

This system, when exposed, as at Farnham, looks very scandalous, but, depend upon it, sir, most other workhouses are like it.

Yours obediently,

THOMAS WIGHTMAN, Guardian.

16 and 17, High-street, Aldershot, Oct. 22.

*** The above letter speaks for itself. A second letter, of substantially similar tenor, and coming from another member of the same board of guardians, appeared in *The Times* of Thursday. More emphatic testimony to the accuracy of our report could not be desired.

DISTRIBUTION OF PRIZES AT THE QUEEN'S UNIVERSITY.

ON Friday, the 11th, the Lord-Lieutenant of Ireland distributed the prizes to the successful candidates for honours in the Queen's University; the chair being occupied by the Right Hon. M. Brady, the Vice-Chancellor, who stated that the number of the college students who have presented themselves for the examinations of 1867 has not fallen off. In fact, the total present number rather exceeds it, though by a small amount. Of these candidates 43 out of 56 who were examined for the degree of Doctor of Medicine have been considered entitled to receive it. Nineteen of the whole number have also obtained the degree of Master in Surgery. Eighty-two medical students, out of a total number of 109 candidates, have passed the first examination in that faculty. The colleges thus continue to maintain in every branch of learning cultivated within their walls that conspicuous standard of excellence which from the first has distinguished their students and reflected honour on their able and diligent professors.

The Lord-Lieutenant, after distributing the prizes, expressed the pleasure it gave him to be present, dwelt upon the importance of every year of student life, as bearing largely on the future character and career of the student, in forming his mind, maturing his intellect, and even shadowing forth his destiny. Referring to a change of residence for the University, his lordship said: "I think I am not venturing too far when I say that I believe the wished-for completion of the new arrangement is near at hand, and that whoever occupies the place from which I now address you in the ensuing year, will, in all probability, be able to congratulate you, if not upon the completion, at least on the actual uprearing of walls, destined hereafter to afford a congenial and suitable abode for your learned conclave. Whenever that time shall come it will be the payment of a debt long due, and too long delayed, in acknowledgment of the great and national usefulness and importance of the manifold functions which have been exercised with such ability and discretion by the Queen's University in this country. It would be superfluous in me where I to dwell on the educational statistics which have been so ably referred to by the Vice-Chancellor, or do more than to allude to the number and quality of the degrees and honours which have been distributed to-day, and which we are glad to hear are not only equal, but more than the average of former years. I may allude with great satisfaction, however, to the large number of young men sent forth by this institution with high qualifications and marked distinctions, not only to the learned professions, but to the civil and other services of the country."

Finally, the Lord-Lieutenant offered his congratulations to the successful candidates, and gave encouragement to those who had competed unsuccessfully.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

OUR winter session has opened with even more than the usual activity; for, in addition to the introductory lectures at the schools, we have had several other meetings of interest during the past ten days. The opening lectures at the schools were delivered to crowded audiences, and each address was marked by special ability. Mr. Pemberton, at the Queen's College, confined himself chiefly to professional topics; but Mr. Bates, at the Sydenham, delivered a very able and eloquent defence of classical education as a preliminary training for medical study. Mr. Bates was listened to with the greatest attention, as, in addition to his position as Lecturer on Classics in the College, he is also a second-year's student of medicine. Contrary to the experience of the London teachers (as stated in THE LANCET of Oct. 12th, p. 469), Birmingham has not as yet found any falling off in the number of new students. Up to the middle of last week twenty new students had registered at the Sydenham College, and thirteen entries were made at the Queen's. These numbers, which will no doubt be increased during the next few days, show what grand results might be obtained if the energies of the profession here were only concentrated in a single medical school.

The new scheme for the Queen's College has not as yet come into operation; the new Council will, however, be appointed next month, and the present professors in the medical department will go out of office (being eligible for re-election) at the end of the winter session. It is much to be regretted that up to the present the public have not come forward in any numbers to support the College. The qualification for the governors (25 guineas up to Christmas, and 50 guineas after) is no doubt too high, as the welfare of the College demanded, not a few rich supporters, but a large, energetic, and widespread constituency. This mistake will not, it is to be hoped, prevent the election of a good working council, as, in the absence of a sufficient number of governors, the council may be formed by the nomination of the best friends of education in the district. The Act of Parliament which places Queen's College, after its many disasters and repeated mismanagement, in a position for fresh usefulness, and free from the influences which have hitherto prevented its success, also improves in no small degree the status of the Queen's Hospital. The hospital is separated from the college, and incorporated by the Act as a clinical hospital. At the meeting of the governors, held to receive the act of incorporation, a most important step for the future of the charity was taken in the purchase of the adjoining rectory house and grounds, which occupy the only land available for the future extension of the hospital, an event which its growing popularity must ere long necessitate.

At the first meeting of the local branch of the British Medical Association, the report of the Council on the Club question was read. As stated in your columns some months back, it consisted of a resolution expressing the inability of the Council to take any steps, in the absence of any complaints on the part of the club doctors. A very lengthy and animated discussion followed the reading of the report, but eventually a committee, consisting of a number of the leading members of the branch, and several club doctors, was appointed to consider the question, and report to a special general meeting of the branch. The committee have plenty of work before them; but if they can obtain the co-operation of the medical officers of clubs, or even a large majority of them, they will be able to perform a lasting service to the profession, and reform one of the most crying evils from which medical men suffer. The club doctors have now only to act boldly in support of the committee, to forget for a moment personal ends for the sake of the general good, and to be true to themselves as a body, in order to win a position which they will never again have so good an opportunity of attaining.

At the first ordinary meeting of the Birmingham and Midland Counties Branch of the British Medical Association, held on the 10th inst., it was resolved, on the motion of Mr. Newnham, seconded by Dr. B. Foster,—"That this Branch beg to record their thanks to the Council for their report, and to request them to refer the subject to a special general meeting of the Branch, to be held at an early date, to take into consideration the present rate of remuneration of medical officers to sick assurance societies, and to receive a report from the following committees: Mr. Newnham, of Wolverhampton (chairman), Dr. Foster, Dr. Heslop, Dr. Wade, Dr. Leslie, Mr. Kite (West Bromwich), Mr. Manley (ditto), Mr. Gamgee, Mr. Gaunt (Alvechurch), Mr. Oakes, Dr. Vinrace, Mr. Swain, Dr. Roden (Droitwich), Dr. Hinds (secretary).

Birmingham, Oct. 12th, 1867.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

WE have lately had two fires in Edinburgh, out of the evil of which it is to be not only hoped, but expected, that good will come. In reference to the first, on the ground-floor of a lofty tenement a firework-maker of the name of Hammond

was permitted to manufacture his dangerous wares. This was not done surreptitiously. It has been stated that, although warned by the authorities, no steps were taken to prevent Hammond continuing his trade; and, undeterred by threats, he has at last been interrupted by an awfully fatal explosion. The injuries to those killed and wounded appear to be due to three causes: fractures and injury caused by leaping from the windows of the house, burning by the flames, and asphyxia from the smoke or fumes of the powder. Of the five whose injuries have been fatal, two were killed by leaping from the house, two were asphyxiated, and one (Hammond's servant) was found dead in the ruins. Of those removed to the infirmary, some of them have already been discharged. The most serious cases were those of Hammond, his wife, and son; the two former were much burned about the face, upper part of the body, and the arms. Mrs. Hammond has also prematurely given birth to a child. The son was burned about the head, and had the left leg fractured. All of these three are going on favourably. They are under the care of Professor Spence. Three females were received into Dr. Gillespie's wards; one of these is pregnant, and was suffering from fright. She was not injured, but supposed she had jumped from a window on the fourth flat; she seems, however, to have escaped by the stairs. She was feverish for two days, but was dismissed to-day recovered. The other two, as well as a female in Mr. Syme's ward, suffered from the effects of the smoke. They progressed favourably, and have now left the infirmary.

It is remarkable that no provision is made for the rescue of persons from our lofty houses in this city. This fire has, however, drawn attention to the necessity of proper fire-escapes. Had these existed, it is probable that some of those injured by this fire might have escaped. Another provision for such an emergency might be suggested: why should not the police be provided with strong nets, into which the people to be rescued could fall or leap? The benefit of such a provision would be great, the cost a mere trifle; and, whilst held by many a willing hand, the safety of the bones of those escaping the flames would be secured. The other fire to which I alluded occurred on the night of Oct. 10th. It commenced in a tan works, and fortunately was confined to the buildings of the city tannery. This tannery is situated in one of the most populous parts of the city, and from the nature of the work cannot but be offensive to many of the inhabitants of the district. It is alleged that in the scheme for the improvement of the Old Town the purchasing of the tan works was contemplated, but the expense was considered an obstacle. Now that a new danger—that of fire—has been added to its other objectionable character, it is to be hoped that the authorities will effect the removal of so disagreeable a trade from the midst of a crowded neighbourhood; but it is not the only tannery which should be removed from the city.

Edinburgh, Oct. 15th, 1867.

THE VACANT CHAIRS AT THE PARIS FACULTY.

IT would be the simplest thing in the world to fill up two clinical chairs which have recently been left vacant at the Faculty, by the demise of Velpeau and by Professor Nélaton's resignation, if, indeed, it were an easy matter to replace two men of such value. The *concours*, or a vote, would soon settle the thing. But with the system of permutations, which is now in force at the School of Medicine, these new vacancies will bring on a series of changes, and produce, as they say in Paris, a veritable *remue-ménage*. Thus M. Gosselin, Professor of Clinical Surgery at La Pitié, takes Velpeau's chair at La Charité; then, if what is rumoured be true, M. Richet, Professor of Surgical Pathology, is to take M. Gosselin's place at La Pitié; and M. Jarjavay, at present Professor of Anatomy, will succeed Nélaton as Clinical Professor of Surgery at La Clinique. So that instead of two chairs of Clinical Surgery being open to a *concours*, or a fresh balloting, the vacancies will consist of a chair of Anatomy and a chair of Pathological Surgery. M. Sappey, the present Director of the Travaux Anatomiques, and the author of an important treatise on Descriptive Anatomy, will probably be named to the former chair, while M. Dolbeau or M. Verneuil will, it is believed, be sent to the latter.

THE WEST KENT MEDICO-CHIRURGICAL SOCIETY.

The Annual Meeting was held on Friday, the 11th inst., at Greenwich, when the following officers were elected for the session 1867–8:—President: Mr. W. Lockhart. Vice-Presidents: Dr. J. Anderson, Mr. H. Barnett. Council: Mr. J. H. Allingham, Dr. W. Carr, Dr. E. Clapton, Mr. D. Hope, Dr. J. N. Miller, Mr. C. Nind, Dr. R. Venables. Treasurer: Dr. P. Purvis. Secretary: Mr. A. Roper. Librarian: Mr. H. W. S. Sturton. The meetings take place at the Royal Kent Dispensary, Greenwich, the second Friday in the month, at 8 P.M.

Mr. Lockhart delivered the inaugural address, in which he reviewed the advantages of local societies, especially in giving opportunity for the utterance and ventilation of individual opinions. He then passed to explain the educational wants of the day, and entered briefly into an examination of the occurrences (epidemic and social) which had marked the progress of events during the last session.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 17th:—

Hullah, Robert, St. Thomas's Hospital.
Maxwell, Edward Cleaver, Cambridge-road, Hammersmith.
Nutt, Charles, Royal Hospital, Portsmouth.

The following gentlemen also on the same day passed their first examination:—

Alfred Stillman Bostock and James Ryall Bouch, of St. Bartholomew's Hospital; George William Smith, of Guy's Hospital.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW. At the recent sittings of the Examiners, the following gentlemen obtained the Double Qualification granted by the Royal College of Physicians of Edinburgh conjointly with the Faculty:—

Callaghan, Joseph, Newtown, Limavady.
Chalmers, James, M.D., Glasgow.
Craig, John, Cramlington.
Irvine, James, Belfast.
Moffat, Alex. C., Glasgow
Richmond, Thomas, ditto.
Sommerville, James, ditto.

The following gentlemen have obtained the Diploma of the Faculty:—

Bradley, John P., Dudley.
Clapperton, Geo., L.S.A., Bolton.
Foster, Jos., Princes Risborough.
Greenlees, Thomas, Glasgow.
Hurford, John G., London.
Mackinlay, John, Barrhead.
Stock, William H., Dublin.
Tatham, John F. W., L.R.C.P. Ed., Murton, Durham.
Walker, A. C., L.A.H., Irvinestown.

The following gentlemen have passed the first examination for the Double Qualification:—

Daniel F. Buckly, B.A., of Cork; John E. Scowcroft, of Bolton.

The following have passed the first examination for the Diploma of the Faculty:—

Robert Buntine, John H. Coverly, and Frederick A. Freer, of Glasgow; George Maclean, of London.

At a meeting of this corporation, held on the 7th instant, the following office-bearers were elected for the ensuing year, viz.:—President: Dr. John Gibson Fleming. Visitor: Dr. Andrew Anderson. Treasurer: Dr. John Coats. Honorary Librarian: Dr. George Rainy. Vaccinator: Dr. James Dunlop. Councillors: The President (*ex officio*), the Visitor (*ex officio*), Drs. William Weir, James Watson, Robert Scott Orr, John Coats, and George Robertson. Board of Examiners: Drs. Andrew Anderson, J. B. Cowan, William Leishman, R. D. Tannahill, William Lyon, James Morton, Andrew Buchanan, George Buchanan, Robert Perry, and Andrew Fergus. Clinical Examiners in Medicine: The Physicians of the Royal Infirmary. Examiners in Arts: Drs. John Coats and James Steven. Clerks: Dr. Laurence Hill and Mr. William Henry Hill. Librarian and Secretary: Mr. Alex. Duncan.

DR. LEWENSKY (of Vienna), one of the first physicians at the Kraakenhaus, has taken poison in an attack of melancholy, and died.

PROFESSOR BILLROTH, who has been called from Zurich to Vienna, in order to fill the chair of Surgery so long and ably filled by the late Professor Schuh, has commenced his course of lectures before a large auditory.

DR. ACLAND, the Regius Professor of Medicine at Oxford, will give general and clinical instruction in the principles and practice of medicine on Mondays and Saturdays at ten o'clock. Students who have passed their last classical examination, and have attended or are attending the courses of Chemistry and Physiology, are admissible. They may also see the hospital practice of Dr. Gray and Dr. Tuckwell. Demonstrations in Morbid Anatomy will be given to them by Dr. Tuckwell, in the Pathological Museum. In or about the first week in December examinations will be holden in the first or scientific part, and in the second or practical part, of the subjects required of candidates for the degree of Bachelor of Medicine. Candidates are requested to communicate to the Professor, personally or by letter, their intention to present themselves for either examination. Notice will be hereafter given of the exact date and place of the examinations respectively.

THE Cholera, which for more than two months ravaged Warsaw, may now be considered extinct. The number of persons attacked during the epidemic, from the 2nd of June to the 2nd of October, amounts to 7234, of whom 4942 recovered, and 2202 died. There were also 388 patients at the military hospital of Ujasdow, of whom 221 recovered, and 152 died.

THE Senatus Academicus of Edinburgh University have resolved to confer the degree of LL.D. on Mr. Disraeli and on the Right Hon. Robert Lowe on the occasion of their visit to Edinburgh next week.

THE "Pall Mall Gazette" states that the St. Pancras Board of Guardians have purchased four and a half acres of land at Highgate, on which to erect an infirmary for the sick poor.

CAMBRIDGE: NATURAL SCIENCES.—Mr. F. W. Danby, M.A., 17th Senior Optime, first in the first class of the Natural Science Tripos, 1864, was, on Tuesday last, elected a Fellow of Downing College. Mr. Danby, who is Natural Sciences Lecturer at Trinity College, is the first person who has been elected a Cambridge Fellow mainly on account of distinction in natural sciences.

M. GUYON has recently presented to the French Academy of Sciences a paper on the transmissibility of glanders between man and the horse. Some years ago, a captain of artillery at Algiers died of what was ascertained to be a well-characterised case of glanders. The blood and fluid of the dead body were inoculated on two mares, a horse, and a mule, four animals unfit for service. The disorder was reproduced on the horse, the mule, and on one of the two mares. It is stated that, long after, a military physician, who had helped to dissect the captain's body, gradually declined in health. His fatal illness was long, and accompanied by peculiar symptoms. It was not until the nature of the disorder had become quite patent that the unfortunate physician recollected his having pricked himself very slightly while dissecting the captain's body.

A SOCIETY has been established in Vienna for the purpose of helping to abolish the long dresses worn by the ladies, which are regarded as not only an obstruction to street traffic, but also, by raising enormous clouds of dust, a cause of considerable danger to the lungs and eyes. The members bind themselves, "the instant they perceive a lady with a long train in the street, to tread on the same with such force as to prodnce a considerable rent in the dress." Any legal expenses are born by the society.

FRENCH CHEMISTS.—The "Journal des Connaissances Médicales" publishes a curious statistical account concerning French apothecaries and chemists, from which it appears that there are at the present moment 35 chemists' shops in Paris, producing collectively 758,060fr., and on sale for the aggregate sum of 1,168,000fr. The average receipts of each are 21,657fr., and the market value of each, 33,371fr. The total receipts of 126 chemists' shops now on sale in the provinces is 1,591,000fr.; the upset prices form a total of 2,062,500fr. The average income of each is therefore 12,626fr., and the value of each 16,369fr. There are in France only three chemists who began to exercise their profession in 1807; there are seven of 1808, six of 1809, three of 1810, nine of 1811, seven of 1812, eight of 1813, and 23 of 1814. The total number now practising in France is 5705.

SANITARY CONDITION OF THE CITY.—From the last report of Dr. Letheby, the medical officer of health, submitted to a meeting of the City Commissioners of Sewers, held at the Guildhall, it appeared that, in the week ending October the 25th, 3235 lbs. of meat had been condemned in the markets and slaughter-houses as unfit for human food. During the week there were 44 births and 38 deaths registered in the City. The mortality returns were below the average (50) for the corresponding period of the last 10 years; and the numbers stated were in the annual proportion of 20 births and 17·2 deaths per 1000 of the population, indicating a satisfactory state of the public health.

A FARMER'S WIFE.—The "Messager du Midi" relates that the wife of a small farmer at Pierrelongue (Drôme) has just been safely delivered of three girls. Fifteen months since she had given birth to twins, having two other children previously, and all girls.

SUDDEN DEATH DURING THE CONVALESCENCE OF TYPHOID FEVER.—M. G. Dieulafoy publishes, in the *Gazette des Hôpitaux* of October the 19th, three cases of sudden death as above stated, which followed each other with remarkable rapidity,—one in private practice, the others in hospital. The first relates to a boy of fifteen, who had reached the twentieth day of the fever. Everything had gone on satisfactorily, and the family attendant, with the consulting men, were just congratulating themselves in the drawing-room on the favourable aspect of the case, when the sister came running in and exclaiming, "Do come quickly; my brother is in a fit." When the bedroom had been reached, the boy was dead. He had been talking very quietly when the medical men had left him, when he suddenly sat up in bed, moved his arms about convulsively, jerked his body fearfully, and whilst the sister had run for assistance, had breathed his last. No autopsy. A week afterwards, at the Saint-Antoine hospital, a man, aged thirty-five, died just as suddenly, also on the twentieth day of typhoid fever. Here a post-mortem examination was made; but, in spite of the greatest care, no tangible explanation of this sudden death could be found. Two months afterwards a young woman of eighteen, at the same hospital, had suffered from a very severe attack of typhoid fever; but she had struggled through it up to the twenty-first day, when she was in a very favourable condition. She then received a visit from her mother, with whom she cheerfully conversed. In the evening she suddenly called the nurse, asked for water, kept her hand to her throat, as if wishing to remove some obstacle to respiration, sat up in bed, made a few long inspirations, became deadly pale, and, before the house-physician could be fetched, sank back in bed, and breathed her last. The post-mortem examination, performed with the greatest minuteness, revealed no cause for this sudden death. Both M. Dieulafoy and the editor of the *Gazette des Hôpitaux* indulge in attempts to explain these and phenomena: but, of course, these are mere conjectures.

THE CHINESE SUGAR-GRASS.—A correspondence in *The Times* last week shows that whilst some have succeeded, others have failed, in rearing a crop of grass from the seed supplied by Mr. Hullett last year. The results are anything but promising at present.

BIRMINGHAM GENERAL HOSPITAL.—Mr. Hughes, the late house governor and secretary, has been presented, by the nurses and servants of the hospital, with a handsome writing-case, bearing, on a silver plate, the following inscription:—"Presented to W. R. Hughes, Esq., F.L.S., by the Nurses and Servants of the General Hospital, as a small token of their sincere esteem."

MEDICAL MEN AND INSURANCE OFFICES IN FRANCE. M. Legrand du Saulle is a well-known forensic physician. He has lately published, in the *Gazette des Hôpitaux*, an interesting article on the above subject, in which he contends, against the opinion of some French practitioners, that medical men may answer the series of questions usually asked by insurance companies respecting the health of patients. With us the matter need not be discussed; but the French Statute Book, article 378, lays a heavy fine on the medical practitioner who shall divulge a secret confided to him by his patient. M. du Saulle shows that the law means to punish the intention of inflicting injury on the patient, and that a certificate of the kind here alluded to cannot be looked upon in that light. Those certificates raise, besides, questions of a very delicate nature in the two countries, for some French authors consider that no

medical man has a right to receive money for such. In fact, M. Tardieu, a great authority in those matters, thinks that insurance offices ought principally to rely on their own medical examiners, and that these companies ought not to apply at all to the usual medical attendant.

TRICHINIASIS AT BERLIN.—This complaint has appeared in Berlin. Seventy cases have already been reported, of which two proved fatal. Most of the patients belong to the same district, and have, it is said, eaten pork, the whole of which was supplied by one butcher. It will be recollected that Professors Weiss and Wiessner, of Vienna, have calculated the number of trichinæ necessary to weigh one drachm. M. Wiessner, in particular, has by aid of the microscope measured the dimensions of these parasites, and settled the area which they occupy. With these data, all referring to the millionth part of an inch, it has been computed that it must take 35 millions of trichinæ to equal the weight of one drachm.

ANOTHER REMEDY FOR PHTHISIS PULMONALIS.—M. Stahlberg, who practises medicine in the Oural mountains, says that fermented mares' milk (koumiss) is a sovereign remedy in phthisis among the populations of those mountains. He explains these good effects by the decrease of the pulmonary secretion, and an improvement of nutrition.

VACCINATION DIRECT FROM THE COW.—The Municipal Council of Naples have just signed a contract with Dr. Negri, who agrees to furnish sufficient lymph, transmited from one cow or heifer to another, to supply the wants of public vaccinators in Naples. No other lymph is to be used. Florence and Venice have followed the example.

DEATH OF M. FOUCHER.—Not only have the veterans of the Paris hospitals been lately mown down in frightful succession, but the ranks of the younger nosocomial physicians and surgeons are being at present sadly thinned by the hand of death. M. Foucher was a most distinguished member of the profession, and had been appointed to succeed the late Follin in the chair specially devoted to diseases of the eye. He died suddenly on the 6th instant of disease of the heart and aorta.

WE mentioned last week the demise of M. Bouley, physician to the Necker hospital. The deceased was, in these times of panting for promotion, distinctions, and money, a "rara avis." Passionately fond of knowledge, his judgment and memory were marvellous, so much so that what he had once read was appreciated at its real value, classed, and retained in his mind. His reading comprised the principal works on medical science, both ancient and modern. Acquainted with almost all the languages of Europe, he had delighted in the literature of many countries. He was quite familiar with English, German, and Italian, and he devoted considerable time to the study of Hebrew. Without stirring from his study, he had become acquainted with all the works of art of which Europe is proud; and his taste in painting, music, and architecture was exquisite. All these gifts were particularly conspicuous in his clinical teachings, which were of the most useful and elegant kind. Of course, it will be readily understood that such a man was shy and nervous; his idea of perfection was such that he did not venture to make use of his experience, his great learning, and the depth of his mind to write a work on general pathology, a branch of medicine for which he had shown a decided preference. His retiring habits made him shun the noise of professional contentions, but he performed his hospital duties with scrupulous punctuality. The race of physicians of this kind has evidently not died out; many, without equalling Bouley, are still bright examples of literary and scientific attainments, heightened by the charm of easy, lively, and captivating conversational power.

Sir JAMES SOUTH, F.R.S., died this week, at an advanced age. He was the son of a dispensing druggist who towards the close of the last century carried on business in Blackman-street, Borough; but James South entered upon a higher branch of the medical profession, and became a member of the Royal College of Surgeons. For some years he practised his profession in Southwark, and in the intervals of business pursued the study of astronomy, in connexion with which he made some valuable observations. He was one of the founders of the Royal Astronomical Society, and was for a time its president. Sir James South was born in 1785.

MEDICAL VACANCIES.

Addenbrooke's Hospital, Cambridge—House-Surgeon and Apothecary, vice Mr. Wallis, resigned.
Birmingham Borough Lunatic Asylum—Assistant Medical Officer.
Dover Hospital and Dispensary—Resident Medical Officer.
Islington Dispensary—Surgeon, vice Mr. Smith, resigned.
London Dental Hospital—Assistant-Surgeon.
Rose Union (St. Weonard's District)—Medical Officer.
Western General Dispensary—Physician in Ordinary.
York County Hospital—House-Surgeon, and Non-resident Dispenser.

MEDICAL APPOINTMENTS.

P. M. ALLAN, M.D., has been appointed Medical Officer to the Morgan Hospital, Dundee.
W. M. BOSARD, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the South District of the Derby Union.
F. P. DARKE, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 4 and the Workhouse of the Alderbury Union, Wilts, vice E. Young, M.D., resigned.
T. J. DENTON, M.D., has been appointed House-Surgeon and Secretary to the Scarborough Dispensary, vice W. H. Platt, L.R.C.P., appointed Medical Officer to the Male Ward of St. Pancras Workhouse.
G. P. GOLDSMITH, M.R.C.S.E., has been appointed Surgeon to the Infirmary, Bedford, vice Wm. Thurnall, M.R.C.S.E., resigned.
E. HAMILTON, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the North District of the Derby Union, vice T. Harwood, L.S.A.L., deceased.
J. W. LEACROFT, M.B., Medical Officer for the Inkberrow District of the Alcester Union, Warwickshire, has been appointed Public Vaccinator, vice J. Morris, L.R.C.P., resigned.
W. SCOBIE MACKENZIE, L.R.C.P., L.R.C.S.Ed., has been appointed Surgeon to the Normanton Iron Works, Yorkshire.
Dr. H. PURDON has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Crossakeel Dispensary District of the Oldcastle Union, Co. Meath, vice H. J. Johnstone, L.R.C.P.Ed., resigned.
C. H. ROBINSON, L.K.Q.C.P.I., L.M.C.P., M.R.C.S.I., has been appointed Demonstrator of Anatomy to the Ledwich School of Medicine.
F. W. A. SKAE, M.D., has been appointed Medical Superintendent of the Stirling, &c., District Lunatic Asylum.

MILITARY AND NAVAL MEDICAL APPOINTMENTS.

F. G. BENNETT, M.R.C.S.E., Assist.-Surgeon 1st London Artillery Volunteer Corps, has been promoted to Surgeon.
R. E. BREDON, M.B., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon 97th Foot, vice Maunsell, appointed to the Royal Artillery.
J. CANDY, M.D., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon 109th Foot, vice Sainter, who has exchanged.
E. H. CONDON, M.D., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon 21st Foot, vice Land, appointed to the Royal Artillery.
E. CONNELLAN, L.R.C.P.Ed., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon 7th Foot, vice Hale, promoted on the Staff.
D. M'G. DAVIDSON, M.D., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon Royal Artillery, vice Hulseberg, promoted on the Staff.
J. DUSTAN, M.R.C.S.E., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon Royal Canadian Rifle Regiment, vice Ramsay, promoted on the Staff.
W. GILL, L.R.C.P.I., Hon. Assist.-Surgeon 1st London Artillery Volunteer Corps, has been promoted to Assist.-Surgeon.
J. GRAY, M.D., Staff Assist.-Surgeon Army, has been appointed Assistant-Surgeon 26th Foot, vice Johnson, promoted on the Staff.
R. D. KEMP, M.B., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon 33rd Foot, vice Hall, appointed to the Staff.
W. R. KINSEY, L.K.Q.C.P.I., Staff Assistant-Surgeon Army, has been appointed Assist.-Surgeon Royal Artillery, vice Roch, promoted on the Staff.
J. LAND, M.D., Assist.-Surgeon 21st Foot, has been appointed to the Royal Artillery, vice Jardine, promoted on the Staff.
T. O'REILLY, Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon 20th Foot, vice Kelsall, appointed to the Staff.
W. SALL, M.D., Staff Surgeon-Major Army, has been appointed to the hon. rank of Deputy Inspector-General of Hospitals, upon retiring on full pay.
D. VALENTINE, Acting Assist.-Surgeon R.N., has been appointed to the "Rattlesnake."
G. E. WILL, L.R.C.P.Ed., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon Royal Artillery, vice Webb, promoted on the Staff.
J. WILLIAMS has been appointed Staff Assist.-Surgeon Army.

Births, Marriages, and Deaths.

BIRTHS.

On the 11th inst., at Scarborough, the wife of J. W. Teale, F.R.C.S.E., of a son.
On the 12th inst., at Weymouth-street, Portland-place, the wife of B. Squire, M.B., prematurely, of a daughter, still-born.
On the 14th inst., at North-street, Chichester, the wife of G. H. Elliott, Surgeon, of a son.
On the 16th inst., at Bray, the wife of Dr. Heffernan, Deputy Inspector-General of Hospitals Army, of a son.
On the 17th inst., at Rosevale, Partick, the wife of J. Paterson, M.D., of twin sons.
On the 19th inst., at Montagu-square, the wife of R. E. Dudgeon, M.D., of a son.
On the 19th inst., at the Poplars, Twickenham-common, the wife of Martindale C. Ward, M.D., C.M., M.R.C.S.E., M. and L.S.A., L.M. Lond., of a son.
On the 19th inst., at Corwold, near Easingwold, the wife of J. W. Smith, L.R.C.P.L., of a son.
On the 20th inst., at Great Eccleston, Lancashire, the wife of T. J. Aubin, M.D., of a daughter.

MARRIAGES.

On the 17th inst., at St. James's, Piccadilly, Arthur Clarke, M.R.C.S.E., of Stock, Essex, to Harriette, daughter of the late James Cooke, Esq., of Livermere, Suffolk.

On the 17th inst., at St. Stephen's Church, Dublin, John Alfred Pigott, second son of the late S. J. Pigott, Esq., of Dublin, to Leontine Honoria, eldest daughter of Michael Ryan, M.D., F.R.C.S., of Upper Leeson-street, Dublin.

On the 18th inst., at St. Peter's, Isle of Thanet, Dr. J. Hadaway, of Welbeck-street, Cavendish-square, to Mary Anne, widow of the late R. Thomas, Esq., of Huddersfield, and youngest daughter of the late E. D. Crofts, Esq., of Margate.—No Cards.

DEATHS.

On the 7th inst., T. S. Gray, M.R.C.S.E., of Gosport, late Surgeon R.N., aged 75.

On the 9th inst., at Lewes, Sussex, Thomas Groening, M.D.

On the 13th inst., J. Heatley, M.R.C.S.E., of Barnes-green, Blackley, Manchester, aged 56.

On the 15th inst., at Broughton-place, Edinburgh, Dr. E. Clarkson, late H.E.I.Co.'s Service, aged 71.

On the 18th inst., John Wightman, F.R.C.S.Ed., of Blossom-street, York, aged 63.

On the 19th inst., Geo. Simpson, F.R.C.S.E., of Gower-street, Bedford-square, aged 62.

On the 20th inst., Thos. Harwood, L.S.A.L., of Wardwick, Derbyshire.

On the 21st inst., William Brodrick, infant son of James W. Smith, L.R.C.P., of Coxwold.

On the 22nd inst., at Liverpool, E. H. Birkenhead, B.Sc. Lond., Lecturer on Chemistry and Toxicology at the Liverpool Royal Infirmary School of Medicine.

BOOKS ETC. RECEIVED.

Mr. Toynbee on Diseases of the Ear.
Dr. Anderson on Eczema.
Mr. O. Pemberton's Illustrations of various Forms of Cancer.
Mr. F. C. Skey's Lectures on Hysteria.
Dr. Ramsbotham's Obstetric Medicine. Fifth Edition.
Dr. Pirrie on Hay Asthma.
Mr. H. Power on some of the Diseases of the Eye.
Prof. Villemin: Etudes sur la Tuberculose.
Dr. Tanner: Signs and Diseases of Pregnancy.
Dr. Fraser on the Physiological Action of the Calabar Bean.
Dr. Smith on Ringworm.
&c. &c. &c.

To Correspondents.

DISMISSAL OF MEDICAL OFFICERS IN ST. PANCRAS.

Dr. Collins will not, we hope, insist upon the publication of a second letter, which we have received from him, respecting the dismissal of the late medical officers of St. Pancras Workhouse. We say this in friendliness to himself. There is not the smallest reason for us to change our previously expressed opinion.

Religio Medici.—It is no part of the duty of a "qualified assistant" to answer a door at which household as well as surgery business is transacted. A gentleman so placed by his principal compromises his position by submitting to such an indignity.

Dr. Pennell informs us that in 1850 he used in Rio Janeiro the bisulphate of soda in yellow fever, but that it failed to do any good. Subsequently he gave it in conjunction with turpentine in the early stages, and with apparently good results.

Mr. Carmichael.—A statement of the case, as short as is compatible with lucidity, will be acceptable.

Chemicus Dublinensis.—What are the subjects of examination at the institution in question?

Observer, (Brighton.)—The subject shall receive attention next week.

THE ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.

To the Editor of THE LANCET.

SIR,—The point as to the letter of the law of the Chest Infirmary against the *practice* of that institution in the election of its physicians is so insignificant, and affects the real nature of our position so little, that we could readily afford to give it up, if the stern fact, on which our original statement was incidentally made, were not before us—namely, that at least three out of the small number of men who have filled the office of physician were elected on the conditions we have stated.

To the infirmary authorities the matter is, however, of more importance; for, if the statement of their Clerk be true, a fundamental rule of the institution was systematically broken three times—a proceeding only equalled in irregularity (to use a very mild term) by the process of allowing words to be added to a resolution passed at a general meeting of Governors.

Your readers will, of course, readily detect that the assumed virtuous defence of the laws as against the practice of the infirmary is merely resorted to in the desperate hope of defaming us in the eyes of our brethren. Fortunately we have no necessity to meet the insolence offered to us, and through us to the profession, which has supported us so unanimously, with any stronger argument than absolute silence.

We are, &c.,
B. W. RICHARDSON, M.D.
London, October 23rd, 1867. ARTHUR LEARED, M.D.

*** We cannot insert any more letters on this subject.—ED. L.

MICROSCOPIC FUNGI AND MALARIAL DISEASE.

AMONGST the many interesting reports sent home by the medical officers of the army, is one of special interest in relation to the ubiquity of minute cryptogamia, and their influence in the production of disease. It is from the pen of Staff Assistant-Surgeon Hugh D. Massy, and bears the title, "Notes on the Prevalence of Fungi at Jaffna during the Dry Season of 1866." We notice this report specially because it contains a series of very carefully conducted microscopic and clinical observations of peculiar interest at the present time. The author of the paper is really in earnest in his endeavours to cultivate medical science in a thoroughly philosophic spirit. Early in the year 1866, a drought commenced; the herbage acquired a withered aspect; rust and blight were common, and malarial and choleraic disease prevailed coincidently. Dr. Massy found the spores and mycelia of fungi in abundance in the drinking water, in the air, in the secretions and excretions and mucous membranes of patients, and elsewhere in abundance. He concludes thus: "It appears highly probable that the poison of intermittent fever is a special poison, conveyed and developed by fungi, of the nature of an organic virus, or product of organic decomposition in a transition state, which it would be desirable to complete the decomposition of as speedily as possible, in circumstances where the formation of the noxious product cannot be avoided, as seems to be naturally accomplished, in some degree, through the nascent oxygen evolved from the green leaves of plants, which latter may in turn succumb, and permit excessive development of noxious fungi that prey upon them, under the conditions of impaired vitality from excessive drought or damp, and the accidents attendant upon the various phases of their growth and development."

J. H. says he has a "patient who every winter suffers severely from chilblains. They almost entirely cover the feet and ankles. All the ordinary topical remedies have been tried. Is there any constitutional treatment worthy of a trial?"

Dr. Massy's communication shall be inserted in the next LANCET.

HOSPITAL GRIEVANCES.

To the Editor of THE LANCET.

SIR,—The correspondence regarding the alleged London Hospital grievances has been read with much interest, I doubt not, by many who have no connexion with the London Hospital. The importance of explaining and removing all causes of grievance between medical students and their professors, and between the junior and senior members of the profession, is sufficiently evident in your devoting an able leading article to the subject in your issue of Sept. 7th. The suggestion made by you, as representing the opinion of the profession, to the Council of the London Hospital regarding a new system which should be adopted in conferring hospital appointments—that the candidates first make application in writing to the Secretary, by whom such applications should be exposed to the scrutiny of all concerned, and that, the time for considering the claims of the various candidates being previously made known, the appointments should be awarded by the Council as a whole, and not by individuals,—is worthy of the attention of other Boards besides that for which it was chiefly intended.

Amongst those that would do well to benefit by the suggestion, I would mention the Directors of the Glasgow Royal Infirmary. Here it has become the custom to appoint the house assistant surgeons and physicians, of whom there are four in each department, with little reference to the interests of the students generally. According to a new regulation of the hospital, the surgeons and physicians have the sole right of nominating their respective assistants, a Committee of the Directors nominally concurring in the election. The same rule holds with respect to the minor offices of dresserships, and bears weightily upon a class of students, who deem it a meanness, and extremely like toadyism, to apply for appointments six months, a year, or it may be more, before the appointment takes place. Moreover, these are students who, rather than condescend to practise earwigging, would forego the appointment altogether, and trust to quiet industry and perseverance in some other field with fewer advantages than those of the Glasgow Hospital School for their advance in the practice of their profession. I could fully illustrate the injustice of the system which obtains at the Glasgow Royal Infirmary; but to bring it before the attention of the amiable and distinguished physicians and surgeons, on whom the duty of election at present devolves, is, I am confident, all that is necessary. Promises of "doing all one can" for candidates, and even promising and conferring appointments at dates long antecedent to their entry into office, is a grievance only to be spoken of to be redressed. Considering the few appointments and the non-prize system of the Glasgow Medical School (good or bad as such system may be; conducive of less good, I believe, than the prize system), it is only fair on the part of honourable professors to decide upon the merits of all the candidates for office without reference to personal likings or dislikings, primary or secondary applications, &c., but solely with reference to the attainments and qualifications of the candidates at the time of election, with a view to further the interests of the Glasgow Medical School, and fully to enable her best students to take the position they might attain to under the guidance of such men as Professors Lister and Gairdner.

I am, Sir, respectfully yours,
Glasgow, September, 1867. MEDUS.

C. H. S.—1. The diploma of the College of Surgeons will not be affected as regards registration by the regulations respecting the examination in Medicine which will come into force in October, 1868. The candidate who passes the examination in Medicine at Lincoln's-inn will still be a *surgeon* only; but if he prefer, as he probably will do, to pass the College of Physicians or the Apothecaries' Hall, and so escape the medical examination at the College of Surgeons, he will *then* be entitled to register a *double* qualification. See the first leading article in THE LANCET of April 20th, 1867.—2. The present possessors of the College of Surgeons' diploma are unaffected by new regulations, which are never retrospective.

Lanarkshire.—Yes, he is entitled to put "Dr." on his card.

PIEBALD NEGROES.

IN the *Norfolk Day Book* (U.S.) are described cases of this kind—namely, a negro in that city whose body is white, and his face as black as lamp-black; a woman whose face is piebald, and another who has commenced to turn, beginning with a white spot behind the ear; another who has been turning ever since he was a boy, whose face, hands, and arms are white, and whose body is black. "Some of the Republican papers in America," says the *Pall Mall Gazette*, "have commented upon these (supposed) facts with great exultation, and appear to consider them as the natural consequences of emancipation, while the Democratic organs ascribe them to miscegenation. But the fact is that there is a cutaneous disease which destroys the colouring matter in the skin of the negro. It is not an uncommon thing to see piebald negroes in Africa itself, and the albino is a congenital instance of the same character." We imagine that the facts are placed on record by the original informant, not in consequence of the novelty of the occurrences to which they refer, but for the purpose of perpetrating a joke at the expense of those who are interested in the question of slavery.

One about to Insure.—We cannot recommend the Office named.

THE GUARDIANS OF THE POOR OF ST. PANCRAS AND THE DISMISSAL OF MEDICAL OFFICERS TO THE WORKHOUSE.

To the Editor of THE LANCET.

SIR,—In your journal of Saturday last there is a letter from Dr. Collins, who appears as the champion of the St. Pancras Board of Guardians, and who condemns in language anything but polite the remarks you have made on the unjust manner in which the medical officers of this workhouse and infirmary have been treated by the present Board.

I think after reading the following statement you will agree with me that the term "gratuitous falsehood," of which Dr. Collins makes use, is more applicable to his own observations than to the remarks made by you.

Soon after the newly constituted Board met, various resolutions and orders were made, which were inserted in the local papers; but when the Visiting Committee brought up their report, the reporters and others were ordered out of the Board-room, and therefore I had no means of learning what they had proposed with reference to the medical staff. In consequence, however, of what appeared some time afterwards in the *Clerkenwell News* and other papers, I went to the Clerk, and asked him if it were true that three medical officers were to be appointed, who should be unmarried men. He said, Yes, and that I was debarred from becoming a candidate as I was married. A short time before this, at a meeting of the Board, a letter was read from the Poor-law Board (who probably were ignorant that I was married), consenting to the proposed arrangement. Neither I nor my colleague received the slightest intimation of the contemplated alteration; and the resolution of the Board was so framed that we should have no power of appealing, as we were not to receive notice of dismissal until *after* the election of the three new medical officers.

I would ask you, Sir, is such a proceeding fair or straightforward, or one which a brother professional should come forward to justify? But who is Dr. Collins? Perhaps the profession generally does not know that he has been for some years past the systematic opponent, publicly and privately, of vaccination, and that he has taken every opportunity of ridiculing it and those who perform it. So much for his professions of respect for his medical brethren. When I called on him some few weeks since, he coarsely told me that he "had a man to put in my place." I presume that my successor is the "man," as Dr. Collins was amongst the number of those who voted for him.

I would ask, would the Board have recommended me to the Poor-law Board for compensation if they had any charge to bring against my conduct as a professional man? Indeed they admitted that they had none, and Mr. Wyatt, the Chairman, held out a prospect of my being recommended for one of the district medical appointments about to be made. Mr. J. R. Collins also said, after the reading of my letter, September 5th, that I "had made out a case of hardship;" the other guardians present made similar remarks; and Mr. Lawford hoped "they would meet the case in a fair and liberal spirit." Dr. Collins says I know right well why I was dismissed. I deny it. I do not know even now (unless for the reason assigned by the Clerk, that I was ineligible for re-election as I was married). Why should Dr. Collins thus suddenly make such a statement, when for several weeks past the press, both local and general, have published such strong comments on the action of the Board, and which he had ample opportunity of refuting much earlier if he had had truth on his side?

In conclusion, I can but express my regret that the only member of the St. Pancras Board of Guardians who appears in print, and makes such misstatements, is a member of the medical profession, and the only one on the present Board.

Yours faithfully,
W. FORD BENNET,
Late Senior Medical Officer of St. Pancras Workhouse and Infirmary.

St. Pancras Infirmary, October 21st, 1867.

P.S.—Since writing the above, I have received the enclosed letter from the Poor-law Board. They do not favour me with the "reasons" assigned by the guardians for my dismissal, and appear to consider that they (the guardians) had power to determine my appointment without assigning any cause for so doing. I have applied to the Poor-law Board for a copy of the guardians' letter and for compensation, about which they say nothing.

[COPY.]

Poor-law Board, Whitehall, Oct. 22nd, 1867.

SIR,—I am directed by the Poor-law Board to inform you that they have been in correspondence with the guardians of the parish of St. Pancras on the subject of the representations made by you to the Board, and they have received a communication from the guardians, in which they state their reasons for having determined to dispense with your services as medical officer of the workhouse.

Having regard to the original terms of your appointment as medical officer, which appears to have been made under the Local Act, the Board are of opinion that the guardians were of their own authority empowered to determine your appointment, in conformity with those terms, if they considered it necessary or expedient to do so.

I am, Sir, your obedient servant,
H. FLEMING, Secretary.

THE PROPOSED NEW HOSPITAL AT MELBOURNE.

WE announced some time since that a new hospital was to be built for Melbourne. But the *Australian Medical Journal* states that "the promoters of the new scheme are still in a condition of uncertainty as to the site of the building. The proposition to place it in the Yarra Park met with such furious opposition from the Richmond people, that the Government decided not to grant any portion of that reserve for the purpose. The University site, which had from the first been strongly advocated by Dr. Neild, was then taken into consideration by the Committee, and the matter was formally brought before the Council of the University by the Vice-Chancellor; but the result of this application is as yet undetermined. Several of the new Hospital Committee, moreover, are strongly opposed to any site north of the Yarra. Mr. Blair, the indefatigable Honorary Secretary, has made several excursions into the suburbs with some of the Committee, to examine the various suitable sites that have from time to time been pointed out. A piece of ground north of the Victoria Barracks, on the St. Kilda-road, has been indicated as a not unlikely situation. There is, however, no doubt that the only suitable way of deciding this question is to pray the Council of the University to give up for this purpose the land south of the Medical School. The interests of the University, as identified with the Medical School, certainly point to this use of the ground. A deputation of the new Hospital Committee waited on the Treasurer to request him to place an additional sum upon the estimates as supplementary to the grant of £5000 already passed by the Legislature. This, however, Mr. Verdon declined to recommend, but said he had no doubt such a sum might be obtained next year."

THE communication of *Dr. Hogarth Clay* has been forwarded to our Commissioner, and a reply shall be given in our next.

INFANTILE DIARRHŒA.

To the Editor of THE LANCET.

SIR,—Having had my attention called to the serious increase in the number of deaths from infantile diarrhœa, so particularly noticed in the recent Report of the Registrar-General, and having had several cases in my own neighbourhood, in which my treatment has been singularly successful, I think it only right to publish the method I adopted.

In almost all the cases I have been called to, I have found a persistent rejection of all kinds of food taken into the stomach; and when milk has been given, it has been returned curdled, in pieces as long as one's finger. The motions have been very offensive, and like dirty water; knees drawn up with pain; constant whining, and a rapid wasting of flesh. I have at once stopped whatever food they may have been taking, and ordered a little veal or chicken broth, with arrowroot or gruel, made with water. Medicine I have found as a general rule to be of very little use. In one case everything had failed, and the child was rapidly sinking, when, as a last resource, I advised a trial of a food which goes by the name of "Dietetic Farina," and to my great delight it was retained. The child soon got better, and is now in good health. Since then I have constantly ordered it to all children brought up by hand. They thrive with it, and in every way it has more than answered my most sanguine expectations. I am satisfied that it only requires to become more known to be universally adopted, more especially in diarrhœa, as it has a great binding tendency, and will supply a want which we have all along felt in the difficult task of rearing children by hand.

I am, Sir, your obedient servant,
Okehampton, October, 1867. THOS. GAMBIER, M.R.C.S.

Messrs. L. Ross and Co., (Leith.)—We cannot undertake the analyses required. Our correspondents should apply to Mr. Harry Leach, of the *Dreadnought* Hospital Ship.

A Subscriber.—It is at the least irregular to apply for an appointment which has not become vacant.

Dr. W. E. Law.—Under the circumstances, a charge should be made in accordance with the capacity of the estate to pay.

A Reader.—The article entitled "A Russian Lady Doctor" originally appeared in THE LANCET, and was copied without acknowledgment by the other medical journals.

THE letter of *A Layman* (Romsey) shall receive attention next week.

SYPHILIS IN THE ARMY AND NAVY.

To the Editor of THE LANCET.

SIR,—As you have declined to insert my letter in THE LANCET because it was too long, yet I hope that, in the interest of the public and of medical science, you will not refuse to insert the following facts, which cannot be controverted.

In 1864, according to the army and navy medical reports, 1845 men were constantly in hospital, labouring under syphilis, at the loss of the services of the whole military and naval force of the country for eleven days, and also at an expense of £99,404 annually.

According to the speech of the Secretary of the Admiralty, Lord Henry Lennox, in the House of Commons on the 15th March last—whereas before I pointed out the necessity for the Government to appoint a Medical Committee to inquire into and to report if there is a syphilitic virus, and before I suggested hygienic means to protect the men from disease,—7¼ per cent. of the whole force were afflicted. But now, although no scientific attempt has been made to inquire if there is a syphilitic virus, yet, according to his lordship, only 2¼ per cent. of the men are now afflicted.

So that, by merely attending to the hygienic means I suggested to protect the men from disease, the number of men constantly in hospital has decreased from 1845 to 535, with a saving to the country of the whole force of the army and navy of seven days, and £71,654 per annum.

Your obedient servant,
DAVID MACLOUGHLIN, M.D.,
Member of the Legion of Honour.

Bruton-street, Berkeley-square, October 22nd, 1867.

THE TREATMENT OF YELLOW FEVER.

Dr. Grant (Staff Surgeon-Major) writes to inform us that upwards of two years ago he suggested a plan of treatment for yellow fever in Bermuda similar to that employed by Mr. Fiddes in Jamaica. He recommended, however, *sulphuric acid*, properly diluted, to be applied to the surface, and also oxygen freely mixed with the atmosphere to be inhaled. Dr. Grant says "it will be seen that, whatever difference in detail there may be between Mr. Fiddes' treatment and mine, the general indication of both of them is the same—namely, to check disorganisation of the blood."

If *J. E.* (Worcester) will send his name and address, he shall receive a private note.

Dr. John Day's (Geelong, Australia) paper "On Peroxide of Iron as a Remedy in Diabetes" shall be published in an early impression.

THE THERMOMETER AS A TEST OF DEATH.

To the Editor of THE LANCET.

SIR,—The subject of a certain test of death having taken place has recently been revived in France, and a prize has lately been offered or awarded on the most certain means of showing that death has really taken place.

My object in writing now is to call attention to the thermometer as a sure means of determining death; the body becomes so cold a few hours after death that I cannot but think it must be many degrees colder than when it contains the least life; for we cannot have life without some degree of heat. To determine the matter, it will be necessary to take the temperature of a number of bodies a certain time after death, and to compare the average with the temperature of bodies in various states of disease or accidents, where the temperature is known to be very low, as in the collapse of cholera, before reaction in cases of drowning, &c. Being in country practice, it would take me some years to make the necessary experiments; but the house-surgeon of one of the large London hospitals would be able to obtain the necessary information within a few months.

Your obedient servant,
THOS. CARTER, L.R.C.P.

Richmond, Yorks, October 22nd, 1867.

A Parochial Medical Officer.—1. There is nothing in the Act which would lead one to suppose that the appointments referred to would be thrown open to competition. The appointments will still be vested in the Boards of Guardians, subject to the approval of the Poor-law Board, and provided that the would-be contractor possesses the qualifications required by the Lords of the Privy Council. The guardians may (subject to the above proviso) contract with any "duly registered medical practitioner," and need not necessarily choose the medical officer. — 2. This will to a great extent depend upon the Board of Guardians. See last sentence in answer to question 1.—3. It is difficult to say who *will* prosecute. The Act in section 27 directs that the guardians "shall cause proceedings to be taken against the persons in default;" but it does not state who the prosecutor is to be. Section 33 says: "All prosecutions *undertaken by the guardians or their officers or any registrar* under this Act shall be deemed to be within the operation of the 7th and 8th Vict., c. 101, sec. 59, and the Union Chargeability Act of 1865, sec. 9." Both sections 31 and 33 would seem to imply that the registrar as well as the guardians would be empowered to take proceedings.

ACCURATE PRESCRIBING.

To the Editor of THE LANCET.

SIR,—Allow me, through the medium of your journal, to call the attention of the medical profession to the inconvenience and uncertainty arising from their not writing on their prescriptions the initials P.L. or P.B., to signify whether they intend them to be made up according to the London or the British Pharmacopœia, thus throwing on the dispenser the responsibility of deciding which is intended. It may be replied that the British Pharmacopœia has superseded all former ones, and should be used unless any other is indicated; but the fact remains that many medical men have not at present taken to the British Pharmacopœia, and some of the older ones, in all probability, never will; hence the difficulty. One instance only will suffice to show the danger which may arise from the uncertainty—viz., that the tinct. aconit. P.L. is three times the strength of the P.B. tincture.

I am, Sir, your obedient servant,
TUTAMEN.

October, 1867.

Dr. T. P. Heslop.—The person is "qualified;" but the transaction is "quackish." His name has already been mentioned in our pages. It is better not to publish the letter.

Dr. W. W. London.—1. To Guy's Hospital.—2. This question must be put more clearly.

Mr. Buck is thanked for the reports received.

INCOMBUSTIBLE DRESSES.

To the Editor of THE LANCET.

SIR,—Permit me to remark that your advice relative to the adoption of incombustible dresses for the protection of individuals engaged in operations such as those conducted in the laboratory of Woolwich Arsenal might have been easily carried out if the Government had shown the solicitude for its servants in dangerous employ that has been shown by private individuals.

More than a year ago I was applied to professionally by the Messrs. Samuels, tailors, of Ludgate-hill, to devise the means of fireproofing dresses for puddlers, enginemen, stokers, and others engaged in furnace and forge operations. I suggested the use of molybdate of soda for impregnating the tissue of dresses. The idea was carried into effect, and with manifest advantage. Under the designation of "Salamandrian Tissue," dresses prepared thus have been long accessible to the public.

Your obedient servant,
J. SCOFFERN, M.B. Lond.

Beresford-terrace, Kensington-park, October, 1867.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir J. Y. Simpson; Sir Henry Thompson; Dr. J. R. Hicks; Mr. Curgenven; Dr. Althaus; Mr. Elliott, Chichester; Dr. Carmichael, Burntisland; Dr. Carter, Richmond; Mr. J. Wearn, Longton; Dr. Heslop, Birmingham; Mr. Harris; Dr. Quelet; Dr. Tatham; Dr. Gibson; Dr. Smith, Coxwold; Dr. Piddock; Mr. Whiteley, Cheltenham; Mr. Whitmarsh; Mr. Bartlett, Melksham; Mr. Buck; Mr. Stuart, Dursley; Mr. Gambier; Mr. Grame; Mr. Horgan; Dr. Maclaughlin; Mr. Wood, Yarmouth; Mr. Mordey Douglas, Sunderland; Mr. Ireland, Kirkham; Mr. H. Jacob; Dr. Hawkes, Hanwell; Mr. Robertson; Dr. Oliver, London, Canada; Mr. Ward, Chelmsford; Mr. Allen; Mr. W. Adams; Miss E. Faithfull; Dr. Massey, Nottingham; Dr. Wright, Birmingham; Messrs. Rose and Co., Leith; Mr. Greenway, South Shields; Mr. Barrow; Mr. Buskell; Mr. W. Smith; Mr. Bradbrook; Mr. Phillips; Mr. Godfrey; Mr. Clowes; Mr. Burchell; Mr. Hooper, Neath; Dr. Mayhew; Dr. Collins; Mr. Hosking; Mr. Reede, Waterford; Messrs. Richards and Co.; Dr. B. W. Richardson; Mr. Cuthbertson, Pontnewydd; Dr. Roberts, Sheffield; Mr. Elwin, Dover; Mr. Thomas; Mr. J. Dearden, Accrington; Messrs. Wilkinson, Market Drayton; Mr. Harben; Dr. Ryan; Dr. Thornley, Newry; Dr. Parry; Dr. Morris; Mr. R. H. Clay, Launceston; Messrs. Kennaway and Co.; Dr. Mackenzie, Normanton; Mr. Crofts; Mr. Knox, Bawtry; Mr. E. Sunderland; Dr. Eaton, Airdrie; Mr. Watson, St. Ives; Dr. Sedgwick; Mr. Bird; Mr. Eager; Mr. Hoare; Mr. Mathews; Mr. Blake; Dr. Robinson, Dublin; Dr. Low; Dr. Day, Geelong; Dr. Priest, Sydney; Mr. A. Duncan, Glasgow; Mr. Locke, Redcar; Mr. W. Little; Dr. Scott, Ben Rhydding; Mr. Barton, Norwich; Mr. Watson, Berwick; Mr. Bell, Daventry; Mr. Knight; Mr. Barker; Dr. Macfarlane, Bothwell; Dr. Hallett, Wanganatta; Mr. Phillip, Dunedin; Dr. Grimshaw, Dublin; Mr. Poulett, New Norfolk; Dr. Edmonds, Auckland; Mr. Harrison; Mr. Wake, Karrachee; Dr. Drysdale; Mr. Bennet; Dr. Elliott, Carlisle; Dr. Grant, St. Georges; Mr. Gibbett, Limerick; Mr. Wilson; Mr. Keats; Mr. Ives, Buckingham; Dr. Oxley; Dr. Fraser; Dr. Smith, Liverpool; Mr. Gawlyn; The Secretary of the Hospital for Diseases of the Heart; One about to Insure; Chemicus Dublinensis; A Parochial Medical Officer; C. H. S.; G. S.; J. H.; Medicus; An Irish Subscriber; Religio Medici; M. C. A.; An Observer, Brighton; An Undergraduate; D. L. S., F.R.C.S.; A Layman; An Assistant-Surgeon; W. W. L.; M.D.; J. E.; An Examiner; I. O. U.; A. B.; &c. &c.

THE *Windsor and Eton Express*, the *Melbourne Argus*, the *Bath Express*, the *Liverpool Albion*, the *Cosmopolitan*, the *Carlisle Patriot*, the *Manx Sun*, the *Melbourne Age*, the *York Star*, the *Times of India*, and the *Tasmanian Times* have been received.

Medical Diary of the Week.

Monday, Oct. 28.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 1½ P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Oct. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Wednesday, Oct. 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
OPHTHALMIC HOSPITAL, SOUTHWARK.—Operations, 2 P.M.

Thursday, Oct. 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Friday, Nov. 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.—8 P.M. Practical Evening for the Exhibition of Specimens and the Narration of Cases.

Saturday, Nov. 2.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.